H.R. 3101, TWENTY-FIRST CENTURY COMMUNICATIONS AND VIDEO ACCESSIBILITY ACT OF 2009

HEARING

BEFORE THE

SUBCOMMITTEE ON COMMUNICATIONS, TECHNOLOGY, AND THE INTERNET

OF THE

COMMITTEE ON ENERGY AND COMMERCE

HOUSE OF REPRESENTATIVES

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WITNESSES

H.R. 3101, TWENTY-FIRST CENTURY COMMUNICATIONS AND VIDEO ACCESSIBILITY ACT OF 2009

THURSDAY, JUNE 10, 2010

HOUSE OF REPRESENTATIVES,
SUBCOMMITTEE ON COMMUNICATIONS,
TECHNOLOGY, AND THE INTERNET,
COMMITTEE ON ENERGY AND COMMERCE,
Washington, DC.

The subcommittee met, pursuant to notice, at 10:05 a.m., in Room 2123, Rayburn House Office Building, Hon. Rick Boucher [chairman of the subcommittee] presiding.

Present: Representatives Boucher, Markey, Inslee, Matsui, Castor, Stearns, Waxman [ex officio]; Shimkus, Terry, Blackburn, Griffith, and Latta.

Staff Present: Amy Levine, Counsel; Roger Sherman, Chief Counsel; Tim Powderly, Senior Counsel; Greg Guice, Counsel; Shawn Chang, Counsel; Bruce Wolpe, Senior Advisor; Sarah Fisher, Special Assistant; Laurance Frierson, Intern; Alex Reicher, Intern; Elizabeth Letter, Special Assistant; Neil Fried, Minority Counsel; Will Early, Minority Senior Policy Counselor; and Garrett Golding, Minority Legislative Assistant.

OPENING STATEMENT OF HON. RICK BOUCHER, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF VIRGINIA

Mr. BOUCHER. The hearing will come to order. Good morning, everyone.

Today our subcommittee examines a measure introduced by our colleague from Massachusetts, Mr. Markey, that seeks to update the laws governing access to communications services by individuals with disabilities.

There are nearly 1 billion Americans who have profound or severe hearing loss and more than 1 million who are legally blind; 4 percent of our population has great difficulty hearing; and an additional 3 percent are visually impaired.

Moreover, as some of us might not want to admit, America is aging. There are approximately 40 million people over the age of 65 living in the United States today. That amounts to 13 percent of our national population. One estimate shows that by the year 2050, that number will more than double to 88.5 million, or an estimated one-fifth of our national population. Naturally, this growth in our aging population will be accompanied by an increase in the

number of Americans who are vision- or hearing-impaired and who will need accessible communications products and services.

With the explosion in Internet-delivered content, both the variety of information and entertainment offerings and the complexity and variety of the devices that receive those services have multiplied. The challenge that we as lawmakers have is to assure that all Americans can benefit from these advances, including individuals with vision or hearing impairments. We will learn this morning about the steps that industry is already taking to make services and devices accessible by the vision- or hearing-impaired.

For example, my iPhone can be made accessible to the visually impaired, straight out of the box with the touch of an existing button. With the rapid growth of smartphones, an increasing number of Americans can download inexpensive third-party applications that perform functions like text-to-speech and speech-to-text.

In the video programming arena, an increasing amount of video content is now available on the Internet in a closed-captioned format, including the video programming of Disney, CBS, noncommercial station WGBH, and videos on YouTube. CBS offers video description of its television programming, notwithstanding the absence of any legal requirement that it do so.

These industry steps clearly mark progress. The question now is what requirements government should consider imposing that will move beyond encouraging the voluntary actions that industry has already taken so as to ensure that an even greater range of services and devices are broadly accessible to people with disabilities.

This year marks the 20th anniversary of enactment of the Americans With Disabilities Act. We have come a long way in the two decades since 1990, but we can go further, both in terms of voluntary steps by industry and in terms of targeted regulation to ensure the accessibility of technology for persons with disabilities.

H.R. 3101, authored by Mr. Markey, provides an outstanding starting point for that consideration.

I appreciate that all of the stakeholders at the witness table today, although none are at the witness table at the moment, but all who will be at the witness table shortly have been engaging with us on a bipartisan basis in order to reach consensus on revisions to H.R. 3101, and I look forward to our continued work together.

I would also note that, on a bipartisan basis on the subcommittee member level and staff level, we are engaged with the interested stakeholders in that collaborative process, and I look forward to a successful conclusion of our work.

I want to thank our witnesses for their attendance today. And I also want to thank Sergeant Major Acosta for his service and sacrifice to our country.

That concludes my opening statement, and I am pleased now to recognize the ranking Republican member of our subcommittee, the gentleman from Florida, Mr. Stearns.

OPENING STATEMENT OF HON. CLIFF STEARNS, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF FLORIDA

Mr. STEARNS. Good morning. And thank you, Mr. Chairman. And I am very pleased that we are having this hearing today.

As we discuss many times in this subcommittee, the Internet and new technologies have transformed the way we all live and we work. Geographic boundaries no longer exist. For example, you could download a movie from another country—legally, of course—sitting on a beach in Florida, while participating in a video conference in Washington, D.C. All of this has been made possible because Congress has let the marketplace flourish by allowing consumers to decide what technologies will work for them.

However, as the technological revolution speeds along, it is important to ensure that people with disabilities are not left behind. All people should be afforded the opportunity to use and enjoy the amazing technology that is available. We can all agree on that point.

The question then is, What is the best way to achieve this goal? Do we need more government regulation? Or do we need to allow the markets to work with as light a regulatory touch as possible? These are the questions that we need to explore during today's hearing, and I look forward to hearing answers to these questions.

Under the Communications Act, manufacturers and carriers are already required to make telecommunication devices and services accessible to people with disabilities when doing so is readily achievable. The statute also requires telephones to be hearing-aid compatible, requires telecommunication providers to help pay for operators that relay phone conversations between people with hearing or speech disability and people without disability, and requires television programming to be closed captioned.

Nevertheless, we are becoming victims of our own success. Due to the success of our deregulatory policies, many new technologies have evolved, and they do not fall within the existing statutory language. This hearing will investigate whether H.R. 3101 strikes the right balance of extending the benefits of technology to people with disabilities without restricting innovation.

One of the provisions in H.R. 3101 requires closed captioning of all digital video, including HD. Sometimes HD is transmitted between a set-top box and a television using an HDMI port. Unfortunately, this port is not configured to allow for closed captioning pass-through. There are a variety of ways to accomplish closed captioning; therefore, it is important that the legislation permit some ports that do not pass through closed captioning, so long as captioning can be delivered to the TV via an alternative port or rendered in the set-top box.

It is also important to clarify who is responsible for the set-top box display. Manufacturers build the set-top box hardware and carriers build the software. This distinction should be addressed in the legislation in order to clarify which entity is responsible for which features.

In many areas, industry is already taking the necessary steps to make certain that their products and their applications are accessible to all people. The iPad, for example, has been lauded as revolutionary not just by the general public, but also by accessibility advocates, because it includes breakthrough accessibility features. This suggests that the broader market could be providing better access to people with disabilities than it does today.

Conversely, Apple and others argue that if the iPad had been subject to detailed mandates from Congress such as requirements regarding the design of the raised buttons, the flat-screen device might not have made it to the market. They argue that the right approach is perhaps to establish accessibility goals, but not dictate how to accomplish them. We need to allow innovation to continue to flourish.

The goals of H.R. 3101 are certainly laudable, and we can all agree on the final destination: Ensure that all people are able to take advantage of the remarkable technology that is available. Will this legislation take us there? Are there changes we might make that would better support accessibility goals and our goals of promoting innovation?

An earlier discussion draft of this legislation benefited greatly from conversations between the wireline phone industry and accessibility groups. Those discussions led to changes supported by all sides which are reflected in the current draft. My hope, Mr. Chairman, is that ongoing discussions with other segments of the communications industry will result in similar improvements. So I hope this hearing will shed some light on these questions and offer up some solutions as well.

Thank you, Mr. Chairman, for this hearing. And I look forward to our witnesses.

Mr. BOUCHER. Thank you very much, Mr. Stearns.

The author of the legislation before us today, the gentleman from Massachusetts, Mr. Markey, previous chairman of this subcommittee, is recognized for 2 minutes.

OPENING STATEMENT OF HON. EDWARD J. MARKEY, A REPRESENTATIVE IN CONGRESS FROM THE COMMONWEALTH OF MASSACHUSETTS

Mr. MARKEY. Thank you, Mr. Chairman, very much.

We can't have a more important hearing. We welcome back to the subcommittee Sergeant Major Jesse Acosta, who testified back in May of 2008. We thank you, sir, for your service to our country.

I think many of our brave men and women in uniform, such as Sergeant Major Acosta, return from Iraq and Afghanistan with injuries that impair their vision and their hearing, and this gives us a great opportunity to help them to be full participants in our great American economic and social and cultural heritage.

This legislation is something that will update laws of the 1990s that really did transform the relationship between people with disabilities and these technologies. Increasingly, this digital skill set is the passport to full participation in our society. And it is happening. It is happening in the marketplace, just not as rapidly as we would like to. The iPad, for example, has the capacity for people who need to be able to listen, because they are not able to read, as clearly as those who are more blessed. And if we press the dial, let's see here.

Wouldn't it be great if, for a very inexpensive, very small amount of money that not just the iPad, but every device, made it possible for people to read or hear Bob Ryan's column in the Boston Globe today about how Ray Allen is going to shake out of his slump from Tuesday night's game and hit all of his 3s tonight against the

Lakers? Well, that is what the iPad makes possible, but people shouldn't have to pay hundreds of thousands of dollars in order to access this information. We should make it a generic standard technology for all of the devices that we have in our country so that everyone is able to be able to participate in this great information revolution that we have in our country.

Mr. Chairman, thank you so much for this hearing. This is about as great a gift as we are going to be able to give to tens of millions of people in our country as this Congress will provide us. Thank you.

Mr. BOUCHER. Thank you very much, Mr. Markey.

The gentlelady from Tennessee, Mrs. Blackburn, is recognized for 2 minutes.

OPENING STATEMENT OF HON. MARSHA BLACKBURN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF TENNESSEE

Mrs. BLACKBURN. Thank you, Mr. Chairman. Thank you for the hearing. And I want to say welcome to all of our witnesses who are here today and to all of our guests. As we are approaching this 20th anniversary of the Americans With Disabilities Act, I am pleased that we are taking the issue up and are going to spend some time on it.

I think we all agree that e-commerce is thriving. As our ranking member said, we have taken a hands-off approach to the Internet, and I think it is going to be important that we strike the proper balance of making the Internet and all mediums of communication accessible to the disabled without stifling innovation or imposing undue technological burdens on the companies who actually are doing the innovation and creating the software and the technology that we are not only enjoying but that we all come to rely on more and more every day.

And as we move forward at what is appearing to be a very aggressive pace, my hope is that we are going to slow this down enough to get it right and get this legislation right. It is unfortunate that time and again we pass bills and then we come back and we tweak bills. I hope that we are going to slow down and do this right. If we fail to get the proper balance between accessibility and encouraging innovation, then we know that we are going to have unforeseen and unintended consequences that we will be back dealing with. It is too important an issue to do that.

I welcome you all. Mr. Chairman, I thank you. And I yield back.

Mr. BOUCHER. Thank you, Mrs. Blackburn.

The chairman of the full Energy and Commerce Committee, the gentleman from California, Mr. Waxman, is recognized for 5 minutes.

OPENING STATEMENT OF HON. HENRY A. WAXMAN, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Mr. WAXMAN. Thank you very much, Mr. Chairman.

Today marks the first step in the process to ensure that Americans with disabilities can more fully participate in our evolving Internet-based society. We will do so by updating the laws con-

cerning access by persons with disabilities to communications services and to video programming. The last update of these laws occurred in 1996 when most phone calls were made over a copper line and when TV signals were broadcast in analog.

As members of this committee, we are acutely aware dramatic changes have occurred since 1996. We need to bring, at long last, our fellow Americans with disabilities across the digital divide. I am pleased that Ranking Member Barton, Subcommittee Chairman Boucher, and Ranking Member Stearns share my commitment to moving legislation that addresses these issues on a bipartisan consensus basis, and committee staff has been working together to achieve that goal.

Ideally we would have a bipartisan bill on the House floor during the week of July 26. That week marks the 20th anniversary of the enactment of the landmark Americans With Disabilities Act. I can think of no better way to mark that anniversary than by bringing to the House floor bipartisan legislation that increases access to digital communications and media for those with disabilities.

With that in mind, today I want this hearing to outline and clarify where agreement exists on the provisions contained in H.R. 3101 and where some adjustment may be necessary. And in doing this, I want to pay tribute to the work of our colleague, Congressman Markey, who introduced legislation and has been the pioneer in pushing this issue.

Our intent is to encourage industry and other stakeholders towards consensus quickly. I am aware that some industry participants and associations have not fully engaged in the discussions to date or have been unable to come up with a position on this matter. I urge these companies and associations to engage immediately on the pending legislation.

There are many success stories concerning the development of accessible technologies absent a legislative mandate. For example, Apple makes many of its products accessible. And when the D.C. Circuit threw out the FCC's first set of video description rules, CBS did not stop making that service available—and continues to do so today.

These initiatives are to be applauded, but more can and should be done. Just as accessibility is designed into new buildings, the same should be true with regard to communications services and devices. Ultimately our goal is to find a legislative solution that meets the needs of the disabled community and gives industry the flexibility and incentives that it needs to move forward successfully. We can take the benefits of laws for disabled Americans, put them together with the best initiatives from the private sector, and pass legislation that brings 21st century communications and media technology to Americans with disabilities.

I want to thank Mr. Markey for introducing this important legislation, Mr. Boucher for scheduling this timely hearing, and all my colleagues for their willingness to work together to pass a law and to meet this momentous occasion. Thank you, Mr. Chairman.

Mr. BOUCHER. Thank you very much, Chairman Waxman.

The gentleman from Alabama, Mr. Griffith, is recognized for 2 minutes.

OPENING STATEMENT OF HON. PARKER GRIFFITH, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF ALABAMA

Mr. GRIFFITH. I would like to thank the chairman and ranking member and chairman for calling this hearing today, and to thank all the witnesses that will appear here to testify before this committee.

Alabama, the home of Helen Keller, but, more importantly, the Alabama Institute for the Deaf and Blind, has always been on the cutting edge. Dr. Graham and his staff are absolutely wonderful. It is over a century-old institution devoted to the subject we are addressing today.

I am a proud sponsor of H.R. 3101, and I am happy this hearing has been called. While I am mindful of the few provisions that need to be worked out amongst us, I am hopeful that we can move this legislation forward as we near the 20th anniversary of the Americans With Disabilities Act.

I believe it is imperative that we continue to focus on innovation and ingenuity. Over the last decade we have made great strides in producing technologies that Americans with disabilities rely on. We must remember what brought us here, which was really a free market, less regulation. This bill seeks to mandate certain technologies, and I am sure that we will work this out in committee so that it will be a satisfactory bill for all. These provisions need some work; however, I think the committee in general is very, very much excited about this bill and I think we will pass it.

Nonetheless, the overall goal of this legislation should be commended. I look forward to working with my colleagues as we press forward to find solutions that extend the benefits of the Internet to people with disabilities.

Mr. BOUCHER. Thank you very much, Mr. Griffith.

The gentlewoman from California, Ms. Matsui, is recognized for 2 minutes.

OPENING STATEMENT OF HON. DORIS O. MATSUI, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF CALIFORNIA

Ms. MATSUI. Thank you, Mr. Chairman, for calling today's hearing. And I would like to thank the witnesses for joining us today.

As we continue our efforts to expand broadband access to more and more Americans, disabled Americans must not be left behind. Every American, including those who are challenged, requires access to updated technologies for personal use, to compete for a job, and to be able to communicate and work in a sound environment.

We are seeing a greater need to assist the number of our service members who are returning from the battlefields of Iraq and Afghanistan disabled and are seeking to return to some sense of normalcy. Access to modern technology will help them achieve that.

Disabled Americans should have access to the same communications products and services that everyone else does. I applaud my good friend, Congressman Markey, for his leadership on providing greater technological access to disabled individuals. His legislation would help ensure that the disabled are able to fully access and utilize broadband services and video programming devices, and I

plan to add my name today as a cosponsor to this important legislation.

We must modernize technologies to make certain that disabled Americans are able to enjoy the benefits of an increasingly diverse and innovative menu of applications and services. It is my hope that all stakeholders continue to work together to advance this legislation in an expedited fashion.

Mr. Chairman, thank you very much for holding this important hearing today. I yield back the balance of my time.

Mr. BOUCHER. Thank you very much, Ms. Matsui.

The gentleman from Ohio, Mr. Latta, is recognized for 2 minutes.

OPENING STATEMENT OF HON. ROBERT E. LATTA, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF OHIO

Mr. LATTA. Thank you, Mr. Chairman, Ranking Member Stearns. Thank you very much for holding this subcommittee hearing today on H.R. 3101, the 21st Century Communications and Video Accessibility Act.

It is my understanding that the legislation would expand accessibility for individuals with vision, hearing, and other disabilities to Internet-enabled communications services, equipment and software. With the latest technology and innovation in the marketplace, it is important that these individuals with these disabilities have access to Internet-related communications and equipment.

I am very interested to hear from our panelists today regarding their ideas and suggestions for helping to reach a consensus on how best to move forward on the issues in this legislation. The Internet and all the communications services related to it is an important tool for employment opportunities. It is also a gateway for individuals to be connected to the greater community.

While working on this legislation, this subcommittee needs to work with all the stakeholders to ensure that all the benefits of the Internet are extended to these individuals with disabilities, without placing mandates on private industry that curb innovation.

Technology is constantly changing, and it is difficult for Congress to legislate policy for new technological devices that will exist in the years ahead. As we move forward on this legislation and other bills in this subcommittee, I firmly believe that we must allow industry to continue to be innovative; and by doing this, it will allow the marketplace to provide for all these individuals. Through the process, we must not mandate such detailed items for certain devices that it prevents technology from moving forward.

I hope that all stakeholder groups involved in this issue can work towards a consensus that better provides access to all individuals with vision, hearing, and other disabilities on these Internet-enabled communication devices, equipment and software. I look forward to the hearing and the testimony today, and I look forward to continuing to work on this important issue.

Thank you, Mr. Chairman. I yield back.

Mr. BOUCHER. Thank you very much, Mr. Latta.

The gentleman from Washington State, Mr. Inslee, is recognized for 2 minutes.

OPENING STATEMENT OF HON. JAY INSLEE, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF WASHINGTON

Mr. INSLEE. Thank you. I just want to thank everyone who is working on this bill because it is important, obviously, not just to the individuals who need this access, but to the whole U.S. economy.

I just want to note that the ability to perfect this technology is important to all of us, not just to those who use the technology, but those who benefit by the genius of those who use technology and their ability to participate in the U.S. economy as employees and associates and business leaders. So it is important for all of us to get this right.

I just want to make one note. I think we do have some work to do on the bill to try to make sure that the disabled community has access to evolving technology. We do not want to limit access to just today's technology, because one thing we know for sure about today's technology is that it will be obsolete and surpassed by new technology within 2 or 3 weeks. And I think there are some things we need to do to the bill to make sure that we capture that evolving technology so that we have full access to all of those new innovations, and I am confident we can do that.

Thank you, Mr. Chairman.

Mr. BOUCHER. Thank you very much, Mr. Inslee.

The gentleman from Nebraska, Mr. Terry, is recognized for 2 minutes.

OPENING STATEMENT OF HON. LEE TERRY, A REPRESENTATIVE IN CONGRESS FROM THE STATE OF NEBRASKA

Mr. TERRY. Thank you, Mr. Chairman. It is interesting, just over our Memorial Week break, I had a couple of meetings. One was with the deaf community on video relay services and some of the actions that are taken by the FCC to make it unaffordable for video relay service providers to continue. Then another group of Alzheimer's patients that are using a new technology, too, to allow special younger onset to use a touch-screen video pad that would allow them to be able to better communicate with their families. So it is interesting that this hearing is after those two meetings where the subjects were the integration of technology to overcome any obstacles by way of a handicap, to neutralize that handicap.

So I embrace the technology, and I want to make sure that we are encouraging the development of technology specifically to aid anyone that has a handicap. What I want to make sure is that we reach the right balance of making sure that this new technology emerges, that it is accessible to all of those who need it without creating economic hardships by way of too many mandates placed on any one technology or system.

So I am anxious to hear from our witnesses today to help us reach that right balance, and I yield back the balance of my time.

Mr. BOUCHER. Thank you very much, Mr. Terry.

All members have been recognized for their statements.

And we welcome now our panel of witnesses. And I would ask that our witnesses proceed to the witness table. We will be happy to have you appear before us and receive the benefit of your testi-

mony. And while you are taking your seats, I will offer just a brief word of introduction about each of our witnesses this morning.

Sergeant Major Jesse Acosta of the United States Army (Retired) is testifying on behalf of the American Council of the Blind and the Coalition of Organizations for Accessible Technology. And I understand this is the second appearance before our subcommittee for Sergeant Major Acosta.

Ms. Lisa Hamlin is the Director of Policy for the Hearing Loss Association of America, and is testifying also on behalf of the Coalition of Organizations for Accessible Technology.

Mr. Walter McCormick is the President and CEO of the United States Telecom Association.

Mr. Gary Shapiro is the President and CEO of the Consumer Electronics Association.

Mr. James Assey is the Executive Vice President of the National Cable and Telecommunications Association.

And, Mr. Bobby Franklin is the Executive Vice President of the CTIA, the Wireless Association.

We welcome each of our witnesses this morning. Without objection, your prepared written statements will be made part of our record. We would welcome your oral presentations, and ask that you try to keep those presentations to approximately 5 minutes.

STATEMENT OF SERGEANT MAJOR JESSE R. ACOSTA, UNITED STATES ARMY (RETIRED), AMERICAN COUNCIL OF THE BLIND; JAMES ASSEY, EXECUTIVE VICE PRESIDENT, NATIONAL CABLE AND TELECOMMUNICATIONS ASSOCIATION; BOBBY FRANKLIN, EXECUTIVE VICE PRESIDENT, CTIA—THE WIRELESS ASSOCIATION; LISE HAMLIN, DIRECTOR OF PUBLIC POLICY, HEARING LOSS ASSOCIATION OF AMERICA; WALTER McCORMICK, PRESIDENT AND CHIEF EXECUTIVE OFFICER, UNITED STATES TELECOM ASSOCIATION; AND GARY SHAPIRO, PRESIDENT AND CHIEF EXECUTIVE OFFICER, CONSUMER ELECTRONICS ASSOCIATION

Mr. BOUCHER. And Sergeant Major Acosta, you are sitting to the far right of the table, and we will be happy to begin with you. I would ask that you pull the microphone in front of you as close as you can and speak as directly into it as possible, and that way we can hear you better.

STATEMENT OF SERGEANT MAJOR ACOSTA

Sergeant Major ACOSTA. Good morning, Chairman Boucher, Ranking Member Stearns, members of the subcommittee, and you, sir, Ed Markey, thank you very much for having me here the second time. This is round number two.

Well, as you have heard, it is extremely important that this measure, H.R. 3101, passes, primarily for those of us who find ourselves completely blind, visually impaired, and in other situations with hearing impairment.

I was here a couple of years ago testifying in front of Congress, or this subcommittee, on this issue. Fast forward. Well, some of the measures as far as 21st century has moved forward. We went from analog to digital. But wait. We forgot about the blind and those

who have hearing problems. What did that do for us? Absolutely nothing.

The reason why I bring this up immediately is because I just recently bought two giant flat-screen TVs, and not one of them will show a scroll, so that way I can see what is going on in case of an emergency. Remember, I come from the State of California where we shake and bake. And so here I am, testifying again on these measures.

Well, here is the story that we all don't like to hear, but it has to be said. As I was discussing with a gentleman early this morning, I got hit by a bomb. I had my eyesight all my life. I was a happy camper. I come home, losing my eyes. I had no idea what it was like, living in the blind community. I have been educated tremendously for the past 4 years, now 4½ years, and I have embraced it. I have adapted. But here is one thing I have not been able to embrace. Being that I live in the United States of America, one of the wealthiest, most powerful countries in the world, I laid my life on the line. And I come home in this situation and find myself—what is out there for me?

Well, it is sad to say not a whole lot is out there for us with the exception, of course, of Apple. Thank you, Apple. Maybe they ought to get into TV production or mass production. But there, again, what does it take for us to serve our blind community or those with disabilities?

It is sad to say that whatever is out there for us, it is going to cost those individuals who—let's say the blind community, 80 percent are unemployed—cannot afford to purchase these items. But Apple has made it accessible to us. You pull it out of the package, and there it is. It is all there.

I testified also on the use of the cell phone, the accessibility. That is why I am going back and forth.

And before I do forget, prior to me getting on board that plane, when I testified 2 years ago, there was a company out there, one of the wireless companies that was going after me, wanting to introduce to me one of the hottest products they had on the market. Well, they met me when I got home after hearing my testimony about how my experiences were with Sprint. Has anything changed? Absolutely not. They introduced to me—and I have that phone here with me. For some reason or another, I don't know why, I kept it. It is completely flat. It is absolutely no use to me. But I keep it as a backup, so that way I can ask someone to help me, guide me through this phone.

Well, I am sorry to say 34 years of service didn't prepare me for this. Yes, we know all that. I was used to pulling the trigger, pulling the pin and throwing a grenade, digging a foxhole or parapet, crawling, doing what I had to do to defend this country. So do I have feelings in my hands or my fingers? Absolutely not. I carry with me a phone that is 4 years old, an LG 8300 that is more pronounced. Old, but at least I can feel the buttons and I can dial out. I couldn't do that with this phone introduced to me. And they were doing me a favor?

Well, let me put it in perspective here. By all means, whatever you can do to protect your eyes, whatever you can do to protect

your hearing, do so. Because if you fall in the category I have, don't be surprised, there is nothing out there for you.

We go to the VA system. And I have to bring this up because they are supposed to be able to provide me with devices in order to make my living a little more easier, accessible, and, in some cases, get back to the workforce. What an absolute disaster that has been. I just recently retired from the United States Army, 34 years of service as a Sergeant Major, the highest enlisted in rank. If it wasn't for Southern California Gas Company creating a position for me as a customer service data analyst in management and being able to work with a Webmaster, showing them where they are going wrong in order to improve on the Web site, which they have. What would it take? All it took was a little bit of open arms to greet us.

Listen to us, and let's make a difference together. Let's not make that mistake. Let's pass this initiative, H.R. 3101. Thank you, sir.

Mr. BOUCHER. Thank you very much, Sergeant Major Acosta. And thanks again for your long service and outstanding service to the United States.

[The prepared statement of Sergeant Major Acosta follows:]

Testimony of Jesse Acosta
(retired combat wounded veteran)

on behalf of the
American Council of the Blind
and the
Coalition of Organizations for Accessible Technology

submitted to the
U.S. House of Representatives
Subcommittee on Communications, Technology, and the Internet
Committee on Energy & Commerce

regarding the
Twenty-first Century Communications and Video Accessibility Act

June 10, 2010

Written Statement of Jesse Acosta

Chairman Boucher, Ranking Member Stearns, and Members of the House Subcommittee on Communications, Technology, and the Internet, I want to thank you for the invitation to discuss the very important topic of accessibility to communications for people with disabilities. I am honored to once again have this opportunity to testify on an issue that affects millions of people with disabilities. My name is Jesse Acosta, and I am a recently retired Sergeant Major in the United States Army, proudly serving our country since 1976. In June 2003, I joined the Individual Ready Reserve program and remained there until I was called to active duty in Iraq in June 2005. My unit was the 376th AG BN DET. 4 and we were mobilized in support of Operation Iraqi Freedom on August 20, 2005, where we were assigned to logistical support missions at Anaconda in Balad, which is the largest support base in Iraq. In January 2006, I received promotion to Sergeant Major. On January 16, 2006, I was wounded in a mortar attack. Among my several injuries are the loss of my right eye and loss of vision in my left eye.

As the result of my loss of sight, my journey to re-establish a normal lifestyle at times has been an odyssey. Nevertheless, I'm moving forward with all the challenges that I have had to face and will continue to do so from this point on. With today's modern technology, our lives can be made a little bit easier if our government chooses to make changes to some of our existing laws that at this point in time do very little to meet the technological needs within the blind community. Unfortunately, very little has changed concerning accessibility breakthroughs in the arenas of telecommunications and video programming since I last testified before this subcommittee in May 2008.

I am pleased to offer my testimony today on behalf of the American Council of the Blind (ACB), which is the largest consumer-based organization of blind and visually impaired Americans advocating for the rights of blind Americans. Comprised of more than 70 affiliates across the entire United States, the organization is dedicated to making it possible for blind and visually impaired Americans to participate fully in every aspect of American society.

As an active member of ACB, which is a founding member and steering committee member of the Coalition of Organizations for Accessible Technology (COAT), I offer my statement.

Introduction and Background

There are roughly 25 million individuals who are blind or who experience vision loss, plus about 100,000 persons who are both deaf and blind, and millions of individuals with other disabilities who benefit greatly from accessible communications. In particular, I offer this testimony today in support of the thousands of veterans with vision loss, including those who are returning from Iraq with injuries to their eyes.

ACB affiliate members are excited by the promises of new Internet Protocol (IP) and digital technologies. Like most consumers, we look forward to the benefits of technological advances.

Unfortunately, history has shown that all too often, people with disabilities have been left out or left behind as these advances have taken place.

We are in the 21st century with all this innovative technology and yet we in the blind community have to rely on assistance from others, especially when it has to do with accessing information through the use of consumer electronics. I own a late model Chrysler Le Baron that comes with a chip that allows you to be informed through voice output when various systems for the vehicle are in need of maintenance. If your oil is low, it will tell you so; the same applies for all other fluids. It talks to you. Why is it that a vehicle that was made almost 30 years ago has the technology that we are seeking at the present time for products like cell phones, DVR's, and cable boxes? This is beyond me.

H.R.3101, the Twenty-first Century Communications and Video Accessibility Act, being discussed today, would be a big step forward. It would amend the Communications Act – the primary statute that addresses telephone and television products and services – to add new consumer protections for persons with disabilities. I will address several critical communications provisions in this legislation concerning people who are blind or visually impaired.

Access to Wireless Devices

H.R.3101 would provide a level of access to wireless devices in commercial products the likes of which my community has never seen before. It would require that mobile and other internet-based telecommunications devices have accessible user interfaces and offer people who are blind or visually impaired access to a full range of text messaging and other heavily utilized services that are currently largely inaccessible to us.

One of my biggest frustrations in adjusting to blindness has been in identifying a cell phone that meets my needs from a usability perspective. I don't think I should have to buy an expensive

$30 data plan and an expensive gizmo-laden phone in order to have functions like "Who's Calling,:" "Last Caller", "Phone Contacts" and "Battery Dead" with text-to-speech so I know where I am and what I'm doing. Why should I have to ask the people around me to tell me what the phone number is on the screen? Why can't they get it to speak out the phone number using the speakerphone that is already on the cell phone?

I haven't been able to find a phone that suits my needs and is accessible. The blind community was very excited to see that Apple built in full accessibility to the release of the iPhone 3GS. In doing this, Apple has proven that a cutting-edge piece of technology can be made accessible off the shelf to a blind or visually impaired consumer. While the iPhone's accessibility is proof that industry can be innovative with accessibility when it wants to be, not every person who is blind or visually impaired needs or wants to own a smart phone. Blind Americans like me want to have options as consumers so that we can identify the most appropriate phone for our needs. Having accessible PDA's is important for a host of different reasons but also ensuring full accessibility to a wide spectrum of different phones is also vital.

Ensuring Accessible Television for People with Vision Loss

Today we are simply asking that television be made more accessible for persons who are blind or visually impaired. Television is a primary source of information, entertainment and news, including local emergency information such as school closings, bad weather and other disasters. While I enjoy television greatly – my favorite TV shows are *CSI: New York* and *CSI: Miami* – picture yourself sitting in front of your television watching your favorite program and having to guess what's happening in between the lines when it gets quiet. Is there movement on the screen, or are they displaying something of interest that you can't see that could be an integral part of the plot? Now let's say it was a crawl being displayed because of an emergency that would be

something of vital interest to us all. Unless we have someone there to read to us, we will not have a clue as to what was displayed on screen. Living in Southern California can present any number of weather-related challenges. We live with fires, mudslides, and earthquakes on a fairly regular basis. So you can see what it means to all who may need this assistance. Self-preservation is critical in emergencies.

We are asking you also to reinstate the Federal Communications Commission's (FCC's) regulations for video description that were struck down by the U.S. Court of Appeals in 2002. And we are asking you to expand those rules in two ways. First, to ensure that video description services are transmitted and provided over digital TV technologies, since the previous set of regulations was for analog television only. Those of us who are blind or visually impaired want to be sure we can hear the video description when we watch our favorite TV shows. In fact, we are also asking you to give some authority to the FCC to require video description for more than the simple four hours per week of programming that the old analog rules required. People who are blind or visually impaired watch more than four hours of television a week!

Second, and even more importantly, we are asking you to require that non-visual access to on-screen emergency warnings and similar televised information is also video described so that we too can know where to go in emergencies, what phone numbers to call and what websites to visit.

Primarily, what we are asking is to make sure we can use the television like people without vision loss. Right now, I have to ask my wife Connie to operate various features of our television for me. We want a requirement for accessible user interfaces on television equipment and controls. For instance, we want accessible on/off and volume controls and program selection for TVs and other devices that receive or display video programming, including Internet-based video programming. This could mean, for example, providing audio output for on-screen text menus that

are used to control video programming functions, as well as a conspicuous means of accessing video description, such as a button on remote controls and first-level access to these accessibility features when available in on-screen menus. We would also like to have the TV programming and navigational guides accessible to people who cannot read the visual display, so that these individuals can make program selections.

Technical and Economic Feasibility

During the period in which the FCC's video description rules were in effect,[1] national broadcasters routinely demonstrated the technical and economic feasibility of description by adding this feature to their programs. With the advent of digital television, it will soon be easier than ever for broadcasters to build into the digital structure ways to pass video description along to viewers. In fact, it is imperative to immediately require that the digital television standard include video description while digital television is nascent, because the failure to do so now may lead to greater technical and economic obstacles to providing video description in the future.

Conclusion

It is imperative that Congress ensure that people who are blind or visually impaired – including the rapidly growing population of senior citizens who are losing their vision – are not left behind as television technologies move more to digital and Internet-based technologies.

On behalf of the American Council of the Blind and the Coalition of Organizations for Accessible Technology, I thank the Subcommittee for this opportunity to share our concerns and

[1] Rules were in effect April 1, 2002 to November 8, 2002. The Communications Act of 1996 authorized the FCC to conduct an inquiry to assess the appropriate means of phasing video description into the television marketplace. Although the FCC's response to this grant of authority was a modest requirement that broadcasters and other multimedia video programming providers in the top 25 major national markets provide video description on only four primetime programming hours per week, the broadcast and cable television industries successfully pursued litigation to overturn this mandate. As a consequence, currently there are no federal requirements to make television programming accessible through video description, nor is similar access to on-screen emergency information required.

urge you to introduce and pass legislation that will safeguard the consumer needs of millions of Americans with disabilities.

Mr. BOUCHER. Ms. Hamlin, we will be happy to hear from you.

STATEMENT OF LISE HAMLIN

Ms. HAMLIN. Thank you. Good morning, Mr. Chairman, Ranking Member Stearns, and members of the Subcommittee on Communications, Technology, and the Internet. I am Lise Hamlin. I am the director of public policy for Hearing Loss Association of America. I am privileged to provide this testimony on behalf of HLAA and the Coalition of Organizations for Accessible Technology.

The 21st Century Communications and Video Accessibility Act of 2009 is a consensus bill supported by COAT and key communications and video program providers, AT&T, Verizon, U.S. Telecom and Windstream. But first, I want to thank you for making this hearing accessible by providing ASL interpreters; the captioning on the screens; and, for me, an assisted listening device, because I use both a hearing and a cochlear implant.

One morning when I was 28 years old, I woke up with a severe to profound hearing loss. The first two devices that I purchased was a volume control phone and a closed captioned—one of those big old closed-captioned decoders for my television. Those two devices allowed me to feel like I was no longer shut off from the world I once knew. This type of technology helps millions of people, including those baby boomers who are aging into hearing loss.

During the 1980s and 1990s, Congress took major steps to improve telecommunications access for people with disabilities; however, many advanced communication technologies are not covered by these existing Federal laws. Today, nearly 20 years after the Americans With Disabilities Act became law, it is important to ensure access to communication. Communication allows us equal opportunity to education, employment, and full participation in American civic life and society.

So why don't companies make their products and services accessible? Well, it is possible there are a few reasons. Lack of awareness. They just don't know. An unwillingness to invest in resources or a desire to make the best possible price and reach the broadest market appeal to maximize their competitive edge. However, accessibility should not be subject to a popularity contest.

That is why I am here today. When you tell all companies to make advanced communication services and accessible equipment, all companies are affected equally. Accessibility requires and then spurs innovation and makes products and services more useful to people with and without disabilities. Designing accessibility into new products is more effective and more cost efficient than retrofitting. These are the principles of universal design contained in section 255 of the Communications Act, and they are the principles behind H.R. 3101.

Now, people with disabilities cannot afford to be relegated to obsolete technologies, to only high-end, high-tech, high-cost equipment or to specialized equipment that is hard to find and expensive. We want an equal opportunity to benefit from the full range of advanced communications products and services. And we believe H.R. 3101 will achieve the greatest possible increase in communication access.

We support H.R. 3101's definition of advanced communications to include non-interconnected as well as interconnected VOIP, video conferencing, and electronic messaging. And we support the adoption of the well-established and appropriate undue burden compliance standards for prospective obligations. We also support the requirement of captioning decoder and display capability in all video programming devices, the extension of closed-captioning obligations to video programming distributed over the Internet, and that requires easy access to closed captions via remote-controlled and on-screen menu.

For people who are blind or low vision, H.R. 3101 does require easy access to television controls and on-screen menus, and restores video description rules and requires access to televised emergency information.

Now, it took us decades to achieve hearing-aid compatibility for telephones, both wireless and wireline; 3101 will ensure telephones that are connected to the Internet will be hearing-aid compatible. And when nationwide relay services were established 20 years ago, the only service available was a TTY, which connected TTY users to other telephone users. Today I use relay services with a captioned telephone, but I am unable to connect to friends who communicate in American Sign Language, who use video relay conferencing equipment, because we use two different kinds of relay services. H.R. 3101 will allow us to call each other.

H.R. 3101 will also establish uniform and reliable real-time text standards for communicating in real time over the Internet, which is hugely important in emergency situations.

And, finally, H.R. 3101 will enable income-qualified people with disabilities to use Lifeline or Linkup subsidies for broadband services, and it will authorize $10 million annually from the Universal Service Fund for specialized telecommunications devices needed by people who are both deaf and blind.

Mr. Chairman, I thank you for this opportunity to testify here, and I hope it has given you a little insight into why we support this important bill.

Mr. BOUCHER. It has indeed. Thank you very much, Ms. Hamlin.

[The prepared statement of Ms. Hamlin follows:]

WRITTEN TESTIMONY OF LISE HAMLIN

ON BEHALF OF THE

HEARING LOSS ASSOCIATION OF AMERICA
AND THE
COALITION OF ORGANIZATIONS FOR ACCESSIBLE TECHNOLOGY

Subcommittee on Communications, Technology, and the Internet
Committee on Energy and Commerce
U.S. House of Representatives

Hearing on H.R. 3101,
The Twenty-first Century Communications and Video Accessibility Act of 2009

June 10, 2010

Introduction

Good afternoon, Chairman Boucher, Ranking Member Stearns, and members of the Subcommittee on Communications, Technology, and the Internet. My name is Lise Hamlin and I am honored to have this opportunity to speak to you about the Twenty-first Century Communications and Video Accessibility Act of 2009 (H.R. 3101).

I am the Director of Public Policy for the Hearing Loss Association of American (HLAA). HLAA is the nation's leading organization representing people with hearing loss. Our advocacy efforts impact communication access, public policy, research, public awareness, and service delivery related to hearing loss. We also raise public awareness about hearing loss prevention, and provide assistance to individuals and their families to learn how to adjust to living with hearing loss. Our national support network includes an office in the Washington D.C. area, 14 state organizations, and 200 local chapters.

I am privileged to present this testimony on behalf of the HLAA and the Coalition of Organizations for Accessible Technology (COAT), which was founded in 2007. COAT is a

coalition of over 300 national, state, and community-based organizations dedicated to making sure that as our nation migrates from legacy telecommunications to more versatile and innovative digital communication technologies, people with disabilities will not be left behind.[1] This coalition's rapid growth and attraction to organizations across the country demonstrates the urgency of the issues being discussed at this hearing. COAT works on behalf of over 36 million individuals who are deaf or hard of hearing, more than 25 million individuals who are blind or who have vision loss, over 70,000 persons who are both deaf and blind, and millions of individuals with other disabilities who need accessible communications. HLAA and many HLAA chapters are COAT affiliates.

I would like to thank the Committee for providing communication access at this hearing in the form of CART (Communication Access Realtime Translation), ASL interpreters and assistive listening devices. These accommodations allow me, and others who are deaf or hard of hearing have full access to this hearing.

People who are deaf or hard of hearing cannot be approached with a "one size fits all" even when it comes to technology. People who age into hearing loss rely heavily on technology. As an individual's hearing changes and as technology changes, they need different accommodations. A person with a milder loss may make do with a simple volume control on their phones. As her hearing loss becomes worse, she may need a telecoil added to directly couple to the phone. When she is unable to hear well enough to make out most of what is said, she may rely on captioned telephones. At each stage, the person who has grown up using her hearing and her voice will seek to use what technology is available to augment her residual hearing. Providing these different kinds of access has proved time and again that it keeps people

[1] Information about COAT and a list of COAT affiliates is available at http://www.coataccess.org.

fully engaged in the life of their community at work and at home. If people no longer have access to technology as it pushes forward into the Internet age, we will clearly be left behind.

I rely on CART because I have a significant hearing loss. When I was 28 years old, I literally woke up one morning with a severe hearing loss. The first thing I purchased was a volume control handset for my phone. The second device I purchased was a closed captioned decoder. I still remember how I felt when I was able to use the phone again, and when I plugged that decoder in and could enjoy television with my family again. These two devices allowed me to feel that I was no longer shut off from the world I once new.

As wonderful as those devices were, that closed captioned decoder and even the clunky phone with the telecoil and volume control would not work at all with technology we use today. H.R. 3101 will ensure that anyone who is hard of hearing or deaf will have access to the Internet we have all come to depend upon.

Background

During the 1980s and 1990s, Congress took major steps to improve telecommunications access for people with disabilities. In fact, as you know, this Subcommittee was responsible for helping to pass several pieces of legislation requiring hearing aid compatibility, closed captioning, and access to telecommunications services and equipment. Nowadays, advanced communications technologies are changing even more the way our society stays in touch and does business. Now there are all kinds of new opportunities to communicate with anyone, anywhere, at any time. But many of these technologies and opportunities are not accessible to people with disabilities.

Today – nearly 20 years after the Americans with Disabilities Act (ADA) became law – it is important to ensure that millions of Americans who are deaf, hard of hearing, late-deafened,

deaf-blind, blind, or who have low vision have access to communication. Communication access enables equal opportunity to education, employment, and participation in the fullness of American civic life and society.

Technological advancements – from hearing aid compatible telephones, to text-based communications and relay services, and now video-based and captioned relay services and equipment – have enabled greater independence and greater freedom than we have ever known. Wireless pagers, e-mail, and text messaging have also enabled us to be more independent and self-reliant.

But many newer technologies, especially advanced communications technologies that use the Internet, are no longer covered by the federal accessibility laws. What this means is that millions of Americans who, like me, are hard of hearing, or who are deaf, may not be able to use these new technologies. That is why I am here today: to ask you to enact the Twenty-first Century Communications and Video Accessibility Act (H.R. 3101).

H.R. 3101 is a consensus bill – supported by COAT and key communications and video programming providers: AT&T, Verizon, US Telecom, and Windstream. H.R. 3101 will ensure that all Americans have access to advanced communications to maintain and increase their independence and productivity.

We all know that technology companies design their products and services for certain markets – generally young and able-bodied Americans with disposable income and a willingness to try and adopt new technologies. But often these products or services are not built for people who have difficulty hearing or seeing or both. Why don't companies include access when they develop services and products for the general public? I believe there are several reasons. Some may simply be unaware of the needs of people with disabilities. Other companies don't want to

use their resources to create accessible products if their competitors aren't doing the same thing. It is obvious from the dearth of accessible products and services that market pressures are insufficient to influence companies to design accessible products – especially when companies believe their money is better spent on trendy electronic features that appeal to a wider market. Accessibility, however, should not be subjected to a popularity contest.

This is why we are here today. When Congress directs all companies to make new Internet-based and digital innovations used for communication accessible, all companies will be affected equally and no one company will have an advantage over another. Even more importantly, accessibility requires and spurs innovation and makes products and services more useful to people without disabilities. When companies ensure that accessibility features are built into products, while they are being developed, the costs of including these features is a small fraction of the overall costs of producing these products. When these companies wait until later, after their products are already on the market, retrofitting costs a lot more and the resulting access is not as effective. These are the principles of universal design contained in Section 255 of the 1996 amendments to the Communications Act. They are the principles behind H.R. 3101.

People with disabilities do not want to and cannot afford to be relegated to obsolete technologies; to only high-end, high-tech, high-cost equipment; or to specialized equipment that is often hard to find and more expensive. They want and need an equal opportunity to benefit from the full range of advanced communication products and services available to and used by their family, friends, and colleagues at home, at work, or on the road. H.R. 3101 will help to accomplish these goals.

Not only will H.R. 3101 direct accessibility for Internet-enabled and digital communication technologies, it will also require the creation of a clearinghouse of information

on accessible advanced communication products and services. This clearinghouse, along with greater outreach and education by the Federal Communications Commission (FCC) will help educate consumers about accessibility and how to find products and services that they can use.

We believe that H.R. 3101 will achieve the greatest possible increase in communications access. We support its definition of covered advanced communications to include non-interconnected as well as interconnected VoIP, video conferencing, and electronic messaging (to ensure access to SMS text messaging, electronic mail, and instant messaging); adoption of the well-established and appropriate undue burden compliance standard for prospective obligations; extending relay service obligations to non-interconnected VoIP providers; and timely action by the delegated authority. These provisions will benefit the deaf and hard of hearing community and our friends who are blind or have low vision for whom these provisions are so vital to ensure truly equal access.

We are also pleased that H.R. 3101 includes provisions that require caption decoder circuitry or display capability in all video programming devices; extends closed captioning obligations to video programming distributed over the Internet; and requires easy access to closed captions via remote control and on-screen menus. H.R. 3101 will also require easy access to television controls and on-screen menus by people who are blind; restore video description rules; and require access to televised emergency information for people who are blind or have low vision.

Hearing Aid Compatibility

It took decades for us to achieve hearing aid compatibility for telephones. The Hearing Aid Compatibility Act (HAC) of 1988 required all wireline telephones to be HAC after August 1989. Cell phones were excluded from the HAC requirements. As far back as 1994, people with

hearing loss understood that being part of the future meant having access to those cell phones. It took many more years of consumers working with the FCC and industry. Finally, in 2001, an agreement was reached though intense consumer-industry negotiation that was adopted by the FCC. However, unlike all wireline phones, only a percentage of cell phones are required to be HAC. In addition, some new smart phones entering the marketplace are not HAC, and their coverage under this law has come under question. This highlights the need for a comprehensive legislation that includes a clearinghouse of accessibility information for consumers.

Now that phone use also means connecting to the Internet, an important provision in the bill will ensure that millions of people who use hearing aids, cochlear implants, and other assistive hearing devices, will be able to use these devices with telephones that connect via the Internet. With Baby Boomers starting to have hearing difficulties, we simply cannot go forward without ensuring that Internet-enabled phones are also hearing aid compatible.

Relay Services

When nationwide relay services were established 20 years ago, the only service available connected TTY users to telephone users. Today, I use a captioned telephone at home and at work. I do have friends and colleagues who communicate in American Sign Language and use video conferencing equipment. To call these people, we need to use both a captioned telephone relay service and a video relay service. An important provision to me in H.R. 3101 is that it will allow users of one type of relay service, such as a captioned telephone service, to call a user of another form of relay service, such as a video relay service. The FCC has been interpreting the Communications Act to mean that relay services can only be used to provide telephone services between a person with a hearing or speech disability and a person without a disability. The result has been that people with speech and hearing disabilities who use different technologies,

equipment, and relay services have not been able to call each other. This surely could not have been Congress's intent in 1990 when it directed the creation of a nationwide system of telecommunications relay services to integrate people with hearing and speech disabilities into the public telecommunications network!

Real-Time Text

One of the most important things that H.R. 3101 does is that it guarantees deaf and hard of hearing people who rely on text to communicate (rather than or in addition to voice) the ability to continue having conversations in real-time as communications move to digital and Internet-based technologies. In 1990, when the ADA was passed, deaf and hard of hearing people were limited to using TTYs to communicate over the telephone network. TTYs use very old ("Baudot") technology. These devices are also very slow (transmitting a maximum of 60 words per minute), work only in one direction at a time (you have to wait until one party finishes typing before you can respond), and generally are not reliable over Internet networks. Their many drawbacks led many people who are deaf or hard of hearing to use text messaging and instant messaging as their principal means of text communication. These newer methods of text communication, however, do not transmit letters as they are typed (as TTYs did). Instead, individuals type and then send text in bursts of phrases, lines, or sentence-by-sentence, rather than sending each character as it is typed.

For millions of people who are deaf or hard of hearing, particularly people who do not communicate in American Sign Language, communicating by text is functionally equivalent to communicating by voice. Just like there are times when hearing people need to have a conversation in real-time (as compared to sending text messages on cell phones or instant messages over a computer), there are times that people who cannot hear need to have their

message received as it is being sent. For example, in emergencies it is very important to be able to convey and receive every piece of information as quickly as possible and at the exact time that it is happening.[2] To illustrate this point, receiving every character of a message as it is typed (such as I_a-m_h-a-v-i-n-g_a_h-e-a-r-t_a-t-t-) can provide critical information if the sender becomes unable to complete or send the full message. H.R. 3101 will ensure that there is a uniform and reliable real-time text standard so that people who are deaf, hard of hearing or who have a speech disability can communicate in a manner that is more functionally equivalent to communication between people who can use their voices.

Universal Service

In addition to using text-messaging through hand-held devices, a great number of deaf and hard of hearing people now use Internet-based forms of relay services, and in particular Internet Protocol text and captioned telephone services, and video relay services. The reason is simple: these forms of relay service offer far more effective ways to communicate than traditional TTY relay services. Internet-based text and captioned telephone relay services allow the transmission of text at much faster speeds than TTYs, and enables conversations to travel simultaneously in both directions. Video relay service enables individuals who use American Sign Language to have conversations that flow more naturally and quickly between the parties. These relay services achieve a telephone experience that more closely parallels the experience of people without hearing disabilities. Approximately one million deaf individuals who sign can

[2]AOL began offering real time text communication in 2008. Their press release explained: "The new real-time IM feature within AIM enhances instant message conversations by enabling users to see each letter that a buddy types rather than waiting for a friend to press the send button to view and read a message. This enables deaf users to respond and react to words as they are typed just as hearing people would do as words are spoken in a voice conversation." AOL Press Release, "AOL Launches Real-Time Instant Messaging Targeted to Deaf and Hard of Hearing Users" (January 15, 2008)

benefit from video relay service as well as from being able to have video conversations with other people who sign. In addition, millions more people who are hard of hearing will be able to benefit from Internet based video conference connections when such conferencing is captioned, so that people can use their residual hearing to get what they can from the audio, rely on the captioning for words they missed, and see all that is captured on the video. Likewise, more than 2.5 million people whose speech is difficult to understand may benefit from video communication because their gestures and facial expressions can be seen by the parties to the call.

Unfortunately, many of these individuals cannot afford to pay for the high speed broadband Internet service that is needed to support Internet-based text, captioned, or video communication. Some of these individuals meet the income criteria to be eligible for Lifeline/Link-Up phone service subsidies, but they cannot use these discounts toward the cost of broadband services. Because the Lifeline and Link-Up programs are tied to telephone network-based services, these programs offer no financial assistance for low income individuals with disabilities who want to replace their TTYs with improved, Internet-based forms of communication. Under H.R. 3101, individuals with disabilities who need the Internet to communicate over distances would be able to choose whether to use their Lifeline or Link-Up subsidies for telephone network-based services or high speed broadband services.

A second universal service provision addressed by H.R. 3101 will greatly impact people who are both deaf and blind. Although the universal service provisions enacted by Congress in 1996 were designed to make sure that everyone in America has access to telephone services, one group of Americans – deaf-blind Americans – continue to be denied this promise. Although a few states have programs that distribute specialized customer premises telephone equipment, the vast majority of these programs do not provide telecommunications equipment that is accessible

to deaf-blind people. One reason is that typically this equipment (such as communication devices with refreshable Braille key pads) costs thousands of dollars per unit. The result is that of all people with disabilities, deaf-blind individuals are the least able to access current telecommunications systems.

It is for this reason that we are asking for a very small portion of the Universal Service Fund (USF) – $10 million annually – to be set aside each year to fund the distribution of specialized telecommunications devices needed by approximately 100,000 Americans who are deaf-blind. The small size of this targeted amount will not be overly burdensome for the USF, but will make a huge difference in the lives of people who are deaf-blind, the most underserved population in telecommunications history.

Conclusion

Mr. Chairman, this concludes my testimony. We call upon Congress to ensure that people with disabilities – including the rapidly growing population of senior citizens who experience hearing loss with increasing frequency and our returning veterans with hearing loss – are not left behind as communication technologies move to new digital and Internet technologies. Thank you for this opportunity today. I hope my testimony has given you more insight into why H.R. 3101 is important for people who are deaf and hard of hearing.

Mr. BOUCHER. Mr. McCormick.

STATEMENT OF WALTER MCCORMICK

Mr. MCCORMICK. Mr. Chairman, Ranking Member Stearns, and members of the subcommittee, thank you for the opportunity to appear before you today.

Mr. Chairman, our industry has a long history of supporting communications access for persons with disabilities. Indeed, our founding father, Alexander Graham Bell, was a teacher of the deaf; and his invention of the telephone in 1876 grew out of efforts to devise a hearing assistance device.

Our industry led the way in developing the first hearing aids and artificial larynxes. And as we approach the 20th anniversary of the Americans With Disabilities Act this July, I would note that Title IV, mandating the creation of a nationwide telecommunications relay service, was one of the first completed and least controversial sections of that landmark legislation.

Likewise, during the mid-1990s, we worked closely with the disabilities community to develop what is now section 255 of the Communications Act, which requires that telecommunications services and equipment be made accessible and useable by the disabled.

Mr. Chairman, in 2008, 2 years ago, at the urging of Representative Markey, we commenced discussions with COAT aimed at updating the law to reflect the Nation's shift to IP-based communications. Those discussions were comprehensive and productive. Over the course of more than 15 months we learned a lot. Working together, we more precisely identified the needs of the disabled. We also gained an appreciation for the frustrations that the disabled community has with procedures of the Federal Communications Commission.

Today, apart from technical fixes to address minor inadvertent omissions, our joint work with COAT is fully reflected in H.R. 3101. It will extend disability access provisions to IP-enabled services and equipment and to new video programming technologies. Among the bill's most helpful additions to current law are enforcement procedures that will put remedies for noncompliance on the fast track, Lifeline and Linkup support for those who meet eligibility requirements, and the establishment of an advisory committee on emergency access and real-time text to provide recommendations to the FCC and Congress.

And much as we appreciate the introduction earlier this month of S. 3304, Senate legislation, we prefer the House bill because it more appropriately reflects the need for technological parity and a level playing field for all advanced communications service providers and manufacturers.

Mr. Chairman, prior to the passage of the ADA, Americans with disabilities grew justifiably impatient with claims that making public accommodations, public transportation, and communications services and equipment accessible just couldn't be done at reasonable cost. What our industry has found in the course of the last 25 years is that both we and the disability community benefit from the certainty and focus that a sound and sensible legal road map for achieving accessibility provides. We believe that with such a

road map, talented engineers and business people across the Internet landscape will respond in good faith.

Again, we thank you very much for the opportunity to appear today.

Mr. BOUCHER. Thank you, Mr. McCormick.

[The prepared statement of Mr. McCormick follows:]

Testimony of
Walter B. McCormick, Jr.
President and CEO, United States Telecom Association
before the
House Committee on Energy and Commerce
Subcommittee on Communications, Technology and the Internet
"The Twenty-First Century Communications and Video Accessibility Act of 2009"
June 10, 2010

Chairman Boucher, Ranking Member Stearns, and Members of the Subcommittee:

Thank you for the opportunity to appear before you today to discuss modernizing the laws providing accessibility to communications for disabled Americans by covering new and developing Internet Protocol-based and video programming technologies.

I am Walter McCormick, President and CEO of the USTelecom Association. USTelecom represents innovative companies ranging from some of the smallest rural telecoms in the nation to some of the largest companies in the U.S. economy. Our members offer a wide range of services across the communications landscape, including voice, video, and data over local exchange, long distance, Internet, and cable networks. What unites our diverse membership is our shared determination to deliver those services to all Americans — a commitment we know this Subcommittee shares.

Our industry has a long history of supporting communications access for people with disabilities. In fact, it reaches back to the very foundations of our business. People often forget that Dr. Alexander Graham Bell was himself a teacher of the deaf and that Bell's invention of the telephone in 1876 grew out of his efforts to devise a hearing assistance device. The primary financial backers of Bell's electrical experiments were the grateful parents of some of his students.

But our industry's commitment to the disabilities community did not stop there. Bell Labs and Western Electric were pioneers in the development of the first hearing aids and artificial larynxes. We later participated in the establishment and deployment of telecommunications relay services. Both AT&T and Verizon offer mobile devices that not only provide text-to-speech access to phone features, but to web pages as well. Many of our members provide specialized offerings, such as free directory assistance, or text- and data-only plans, so that people who are deaf or have hearing loss will not pay for voice communications services they are unable to use.

Our commitment to bringing the benefits of telecommunications to all Americans, including those with disabilities, is also mirrored by our work in the legislative arena. As we approach the 20th anniversary of the Americans with Disabilities Act this July, I would note that one of the first completed, and least controversial, sections of that landmark legislation was Title

IV, which mandated the establishment of a nationwide telecommunications relay service by 1993. In 1994 and 1995 we continued our efforts in this area, working with the disabilities community to develop and support what is now section 255 of the Communications Act. That section requires providers to ensure that telecommunications services and equipment are accessible to and usable by people with disabilities.

In 2008, Mr. Chairman, your colleague from Massachusetts, Representative Ed Markey, raised the question of whether it was time to update section 255 of the Communications Act to reflect the reality of our industry's shift to IP-based communications and the advent of new video programming technologies. Representative Markey encouraged us to work with the disabilities community and taking a page from the history of section 255's development, we entered into a series of discussions with the disabilities community, represented by the Coalition of Organizations for Accessible Technology (COAT).

Our discussions with COAT would take over 15 months and more than 40 legislative drafts to complete. While time consuming, these discussions were also illuminating. We were able to identify more precisely the needs of the disabilities community and to target the bill to address those needs. We also gained an understanding of their frustrations with how the current processes and procedures at the Federal Communications Commission work to delay and inhibit their ability to bridge the communications gap for their members. Apart from technical fixes to address minor inadvertent omissions from the introduced bill, our joint work with COAT is fully reflected in H.R. 3101, the 21st Century Communications and Video Accessibility Act, which Representative Markey introduced in June of 2009.

In general, H.R. 3101 is designed to extend disability access provisions applicable to legacy telecommunications and video services to IP-enabled services and equipment and to new video programming technologies. The legislation also acknowledges that section 255 of the Act, with its limitation to telecommunications services and equipment, does not encompass many of the services that people routinely use today. Thus, the bill appropriately places the treatment of advanced communications for these purposes under Title VII of the Communications Act.

Among the bill's most helpful additions to current law are enforcement procedures that will put remedies for noncompliance on a fast track, something sorely lacking today; Lifeline and Linkup support for Internet access services and advanced communications for those who meet those programs' eligibility requirements; and the establishment of an Advisory Committee on Emergency Access and Real Time Text to provide recommendations to the FCC and to the House and Senate Commerce Committees regarding the actions necessary to ensure interoperable real time text communications as part of the migration to a national IP-enabled network, a critical public safety need for disabled Americans in the 21st century.

The legislation would also achieve what the FCC was unable to do in 2000: ensure that video description capability is made widely available, not just for television broadcasts, but also for certain video programming distributed over the Internet, the place where more and more Americans are watching video today. Methods to improve the conveyance of emergency

information by means of video will also be required under H.R. 3101, and closed captioning will be similarly advanced to include Internet distribution. Equipment that receives and plays back video programming will be required to have closed captioning, video description, and accessible emergency information capability.

The FCC's consideration and development of the National Broadband Plan in late 2009 and early 2010 gave us yet another opportunity to work with the disabilities community to ensure recognition of their needs as we enter an era in which IP-based technologies will provide the basis for most if not all electronic communication. We were particularly delighted by the inclusion of Recommendation 9.10 in the National Broadband Plan, which states that "Congress, the FCC and the Department of Justice should modernize accessibility laws, rules and related subsidy programs." The Commission adopted H.R. 3101's definition of "advanced communications," which was developed as a result of the joint USTelecom/COAT discussions. We are also pleased the Commission has already begun to implement Recommendation 9.9 to establish an Accessibility and Innovation Forum, the first meeting of which is scheduled in July. We believe our experience working closely with COAT, replicated on a broader scale and on a more systematic basis, will hasten the advancement of broadband accessibility.

We also appreciate Senator Pryor's introduction earlier this month of S. 3304, the "Equal Access to 21st Century Communications Act," and its co-sponsorship by Senators Kerry, Dorgan and Conrad. It is the next important step in the process of updating the nation's laws governing access to advanced communications technology for people with disabilities. In our recent testimony before the Senate, we highlighted the many aspects of the bill that similarly reflect our discussions with COAT. We also highlighted two issues that give us some concern -- its achievability standard and the technological disparities the bill would create. I have attached a chart to my testimony illustrating the technological disparity issue, and how specific services would be treated under the House and Senate measures. Accessibility requirements, standards, and criteria must be applied uniformly to all advanced communications service providers and manufacturers. Moving forward, we would like to continue working with the Senate to clarify those provisions.

Prior to passage of the ADA, Americans with disabilities grew justifiably impatient with claims that making public accommodations, public transportation, and communications services and equipment accessible "just couldn't be done," or couldn't be done at reasonable cost. Over and over again, many of those claims were proven wrong. When an industry starts out with the attitude that providing accessibility is too hard, it's not surprising that not much gets done. What our industry has found in the course of the last 25 years is that both we and the disabled community benefit from the certainty and focus that a sound and sensible legal roadmap for achieving accessibility provides. We believe that with such a roadmap, talented engineers and business people across the Internet landscape will respond in good faith to the challenge.

Mr. Chairman, in closing, let me reiterate our commitment to this effort. Americans are more reliant than ever on communications devices and networks in their daily lives, but Americans with disabilities can derive particular benefits from these technologies. As these

exciting new technologies evolve, that population could become increasingly disadvantaged if they are denied access to them.

We thank you for your invitation to appear today. USTelecom and its member companies look forward to working with the Subcommittee and this Congress to achieve our shared objective of making the use of broadband as ubiquitous today as electricity, water, and telephone service. Broadband is an essential building block of every modern American community. We pledge our support for making its many opportunities accessible to all Americans. Thank you.

COMPARISON OF HOUSE AND SENATE BILLS

SERVICE OR APPLICATION	H.R. 3101	S. 3304
Advanced Communications	The term "advanced communications" means interconnected VoIP service; non-interconnected VoIP service; electronic messaging; and video conferencing.	The term "advanced communications" means devices and services that transmit a bundle of IP enabled voice, video conferencing and text communications and any application or service accessed over the Internet that provides voice, video conferencing or text communications as determined necessary by the FCC.
User Interface for Internet Access Service	Yes	Yes
Interconnected VoIP (e.g., Vonage)	Yes	Yes
Video Conferencing	Yes	Only if bundled with IP voice and IP based text communications; *otherwise, only if FCC finds "necessary" (e.g., Skype video conferencing)*
IP Based Text Messaging	Yes	Only if bundled with IP based video conferencing and IP voice; *otherwise, only if FCC finds "necessary" (e.g., instant messaging by MSN, Yahoo, or AOL, or IP-based text messaging such as Skype SMS)*
E-mail	Yes	Only if bundled with IP based video conferencing and IP voice; *otherwise only if FCC finds "necessary" (e.g., Gmail, Yahoo Mail, HotMail)*
Unbundled Non-IP Based SMS text messaging (e.g., AT&T, Verizon, Sprint)	Yes	No
Other Unbundled Voice Applications (e.g., Google Voice)	No	If the FCC determines necessary

Mr. BOUCHER. Mr. Shapiro.

STATEMENT OF GARY SHAPIRO

Mr. SHAPIRO. Chairman Boucher, Ranking Member Stearns, and members of the subcommittee, thank you for this opportunity to testify on the laudable goal, which I think we all share here, of ensuring access to new technologies by persons with disabilities.

I am very proud to represent some 2,000 technology companies who in a short period of time, both individually and collectively, have changed how all Americans have accessed entertainment and education.

Now, our industry has a very long and proven commitment to providing products and services to the disabled community without government intervention. From advances in screen readers, closed captioning on mobile devices, to GPS applications for the blind, we have radically transformed how most disabled Americans can stay informed and connected.

We have had several meetings with COAT to understand the issues they are trying to address in this legislation, and we agree that there is definitely a need for better communication of the accessible products and services that are available today in the marketplace. With this in mind, we applaud the bill's establishment of a clearinghouse of information of the availability of accessible products and services.

The consumer electronics industry invented closed captioning, and is a good example of a narrow government intervention with a very positive result. During the process, Congressman Markey changed the proposal to give manufacturers flexibility in implementing the requirement. The result is that captioning comes in various ways through industry-agreed upon standards. And indeed, we are now working on voluntary solutions for closed captioning of video content distributed over broadband networks.

While we share the goal of providing access to technology to all persons, our experience has taught us that voluntary, multi-stakeholder, open due process, and approved standard-setting efforts are a better way to go than simply mandating that every function of every product be accessible to people with every type of disability.

To put it simply, mandating universal design is an innovation killer. Innovation leads to accessibility, not the other way around. The V-chip represents a consumer electronics innovation that turned into a failure after it was rushed through Congress as a mandate and one patent owner imposed huge costs on all involved, as it believed Congress had mandated the use of its technology. The result still today is a cumbersome and complicated system which few parents use. Innovation and parental control technology has happened through market forces entirely outside the congressionally mandated V-chip solution.

So we have to learn from these past mistakes. We understand and we share the desire and compelling case for expanding the access of technology to Americans with disabilities. However, H.R. 3101 is extremely broad in its scope, chilling innovation and entry of new products. Moreover, it ignores the great number of products in the market which are increasing every day and serve the needs of many in the disability community.

According to C–NET, 190 wireless phones are hearing-aid compatible, over 400 are TTY-compatible, over 1,200 have vibrating alert capability, 5 allow audible battery alert, and over 300 have voice control capability. And you can do this with a simple Web search which allows comparisons by accessible features.

Now, certainly we strive to ensure that no American is left behind, but innovators do need flexibility to introduce new products. Given the multiple and sometimes conflicting needs of persons with different levels of ability, manufacturers can address these needs with freedom to invent and sell a great number and variety of products. From a technical and financial perspective, manufacturers simply cannot incorporate every accessibility feature into each and every device.

Now, our written statement is very specific about the concerns we have with this legislation. The definitions are broad. They will likely capture almost every electronic product. Indeed, with the move to Internet protocol V–6, IPV–6, almost every product using electricity will be connected to the Internet. Video games, lighting and security systems, home control systems, and even automobiles will all be subject to the overwhelming universal design mandates in this bill.

If our objective is to both encourage innovation and provide accessible products and services, this legislation must recognize that we are edging up against the bounds of physics and engineering. For example, hand-held can only have screens so large or so many function keys or buttons before they are rendered unusable.

Another problematic provision in the bill is that it retains the outdated accessibility followed by compatibility regime of section 255, and then makes it worse by saying with this new heightened undue burden standards, today's software-based telecom and media devices are compatible or interoperable with software-based assistive technologies.

Today in America we obviously face a very difficult, challenging economic situation, and it is going to get worse and worse. But we have some secret source, and that is our innovation. We are home to every significant Internet company. We are home to the greatest microchip companies and technology companies like Apple and others. But remember, every one of these big companies started as a small company, and we have to be careful that we don't change how a company can enter the market, and also even how a big company can market a new innovation.

At CEA, we believe we have to remain the most innovative Nation on Earth, and we urge you as policymakers to recognize our strength and innovation, and examine these policies through the lens of whether it is good or bad for innovation, and thus our economic future.

In closing, we will continue our efforts to ensure that all Americans can reap the benefits of new and emerging technologies. However, due to layers of complexity in this and limitations it would place on the advancement of new technologies, we do not believe as drafted it is the right approach. We have submitted alternative language that improves accessibility to Internet-based communication and video technologies while balancing the need to promote innovation, and we look forward to working with all the interested

stakeholders on a legislative approach that reflects the rapid innovation of our market with the desire to ensure that these products and services are accessible to persons with disabilities.

Mr. BOUCHER. Thank you very much, Mr. Shapiro.

[The prepared statement of Mr. Shapiro follows:]

Before the
House Energy and Commerce Subcommittee on
Communications, Technology and the Internet

Hearing on H.R. 3101
The 21st Century Communications and Video Accessibility Act of 2009

June 10, 2010

Written Testimony of
Gary Shapiro
President and CEO, Consumer Electronics Association

Chairman Boucher, Ranking Member Stearns and members of the Subcommittee, thank you for this opportunity to testify on the important issue of access to new technologies by persons with disabilities. I am proud to represent over 2,000 American technology companies, who in a short period of time both individually and collectively, have changed how all Americans access information, entertainment and education.

The technology innovations which have brought us wireless, the Internet, PCs, digital radio, MP3, HDTV, broadband and narrow band have quickly transformed society. Moreover, technology innovation has been the one American bright spot in what otherwise is a challenging economy. As I travel around the world and meet with industry and government, they look to the United States with envy as the leader in technology and innovation. Indeed, our nation has produced more innovation connected to communication and the Internet than all the other nations in the world combined. Today, America is the home to every significant Internet company and most of the world's great microchip and technology companies. But every big company started as a little company and we must be careful of doing anything which makes it more difficult for a new company to enter the market.

Our American dream is based on the power of new ideas, new inventions and a better way of doing things. Simply put, we need to protect the special sauce that is American innovation and leadership.

At CEA, we believe our national future is tied to our ability to remain the most innovative nation on earth. We urge you as policymakers to recognize our national strength in innovation and examine policies through the lens of whether it is good or bad for innovation and thus for our economic future. Indeed, the Innovation Movement we launched less than one year ago has attracted over 60,000 Americans and its singular focus is advocating for policies conducive to innovation.

Among these policies is the ability of manufacturers to have flexibility in designing products. We continue to applaud the 1985 Supreme Court decision in the Sony Betamax case which found that products are legal if they have significant legal uses. Without this finding, many of the technologies we experience today would not have been developed or sold, as they were opposed by one group seeking to design products a specific way: so they could not record.

When government has stepped in narrowly to meet a specific purpose, we have had a good result. One successful example is the closed captioning requirement. Although my predecessor opposed it over 20 years ago when Congressman Markey first proposed it, I was pleased to work with Congressman Markey who then changed the proposal to give manufacturers flexibility in implementing the requirement. The result is that captioning comes in various ways through industry agreed-upon standards. The trick here was a narrowly defined purpose, flexibility and options which allowed manufacturers to distinguish their products from each other. The initial costs were high but they became unnoticeable to the consumer as intense

competition, the shift to digital and the use of standards without patent complications allowed the cost increase to be absorbed in the deflationary spiral of consumer electronics.

Another excellent example of a strategic government industry partnership is the shift to digital television. By all accounts, the United States has the best standard and the smoothest transition to digital. Almost all Americans now enjoy the sounds and beauty of digital television. In both of these examples of success, the FCC allowed all interested stakeholders to arrive at the best technical solution through a deliberate, open standards process with appropriate obligations on both the content source and the receiver.

An example of a less successful governmental technology requirement is the v-chip. This well-meaning effort to help parents keep children from viewing inappropriate content was based on a CEA voluntary proposal. Rushed through Congress as a mandate, it used proprietary technology, resulting in expensive and time-consuming litigation, as well as an unclear purpose. Without competition among manufacturers –as it was a mandate – along with an overly complex ratings system, the result is a system which few parents use. Innovation in parental control technology has happened through market forces entirely outside the congressionally mandated v-chip solution.

Today, we understand the desire and compelling case for expanding the access of technology to Americans with disabilities. However, the legislation before us - H.R. 3101- is extremely broad in its scope; chilling innovation and the entry of new products. More, it ignores the great number of products on the market which serve the needs of many in the disability community.

According to CNET, which allows product searches by accessible features, 190 wireless phones are hearing aid compatible, 401 are TTY compatible, 1,244 have vibrating alert capability, five allow audible battery alert and 304 have voice control capability. CNET product reviews also provide device comparison charts for caption-enabled mobile media devices ranging from Blackberries to iPhones and the Sling Player Mobile, as well as wireless carrier guidance for accessible products and services and GPS software and devices for the visually impaired.

I will be specific about our concerns and how we suggest the bill be changed to meet the laudatory goal of encouraging a marketplace where all Americans have access to the miracles of modern communication. But America must also have a goal of encouraging innovation and not creating new barriers to entrepreneurs. Therefore, our objective is to meet the needs of disabled Americans and meet our national focus on the free market as the greatest innovation creator. We are also edging up against the bounds of physics and engineering, and the reality that the increasingly common handheld devices can only have screens so large or so many special function keys or buttons. We strongly believe it is not an appropriate government role to mandate any of these functions, keys, buttons or designs.

As currently drafted, H.R. 3101 does not take into account the ever-changing dynamic of Internet-based services and devices. We are no longer living in a world of single function devices. Internet-based voice, video and data services and equipment involve a diverse and symbiotic ecosystem of content providers, service providers, software applications and network edge devices. Each part of the distribution chain must cooperate to provide the end user with an acceptable result. The legislation's attempt to adapt old regulations established to apply to primary function services and devices, such as Section 255 and FCC's closed captioning rules, to

new multi-function devices will not produce the desired results, and will only impede the advancement of new technologies and accessible features.

Bringing new products to market involves numerous variables and requires balancing technical limitations with trade-offs, flexibility and creativity. The development of new products is highly time-driven, but it also is an iterative process, with new features being added or removed constantly in a series of small development and testing cycles determining what capabilities, dimensions, and other factors can realistically be put into a product that is capable of competing successfully in a highly competitive market.

If developments in each of these cycles were viewed against a set of difficult-to-meet standards as required by H.R. 3101, and the cost – from detailed record-keeping at all stages of product design and implementation to justify business decisions, to administrative and legal proceedings – of potentially huge liability, the innovation of new products and services would slow to a halt. The impact on small business entrepreneurs – many whom are CEA member-would be especially challenging.

As introduced, Title I of H.R. 3101 would require many current and future Internet-based voice, video and data services and devices to be accessible to all people with disabilities. Coupled with a heightened undue burden standard, one can only imagine if the iPhone or the Internet itself would have ever been brought to market if H.R. 3101 was current law.

We strive to ensure no American is left behind, but we also need the flexibility to develop new products that address the needs of all consumers. Given the multiple, sometimes conflicting, needs of persons with different levels of ability, it is important that manufacturers have flexibility which will ultimately lead to a greater number and variety of products to meet

different user needs. Manufacturers are simply unable to incorporate all accessibility features into all products without compromising the function and affordability of products.

The approach set forth in H.R. 3101, requiring all service and devices to be accessible with the FCC developing and mandating technical standards for such accessible features would not result in more products being accessible or more innovative designs. Rather, it would result in overly burdensome compliance costs, less variety of products and would hinder United States competitiveness in the global market.

As an alternative, we have suggested amendatory language expanding the scope of voice and messaging communications services and applications, beyond what is required under current law. These proposed amendments would provide certainty to service providers and manufacturers as to the extent of their obligations. This language would help to ensure that there are choices in the marketplace for devices with certain accessible functions, but not require all devices to incorporate all functions.

Further, it is a core CEA belief that the development of technical standards must be left to consensus-based industry standards bodies, rather than government agencies or Congress alone. Such groups are open to participation by non-industry members, and constitute the best and most efficient way to approach industry-wide issues, while at the same time protecting innovation.

Another problematic provision of the bill is that it retains the outdated "accessibility-followed-by-compatibility" regime of Section 255 coupled with the **heightened undue burden standard**. Today's software-based telecom and media devices continue to progress in the area of compatibility or interoperability with software-based assistive technologies. However, Section

255 of the Telecommunications Act of 1996 does not recognize these applications as a legitimate means to comply with its accessibility requirements.

Currently, whenever it is not readily achievable to incorporate accessibility features into a product or service, the manufacturer or provider is required to ensure that the equipment or service is compatible with existing peripheral devices or specialized customer premises equipment commonly used by individuals with disabilities to achieve access, if readily achievable.

When Section 255 was written, the only types of assistive technologies available for mobile and wireline phones were items such as TTYs and handset amplifiers. Mainstream accessories and software for mobile devices, such as a Bluetooth keyboard or Code Factory Mobile Speak are now extending the boundaries of software and hardware peripherals that provide benefits as assistive technology. As an alternative, CEA proposes a cleaner "either-or" option that would allow industry to address consumers' needs in a more effective and flexible manner.

We are also concerned about the scope and intrusiveness of the reporting obligations and believe that the industry and the FCC must be afforded flexibility with respect to the content and format of any reports. Alternatively, CEA proposed an annual officer certification that would help to ensure that accessibility issues are a high level corporate policy and provide for protection of proprietary information.

The complaint resolution requirements in H.R. 3101 would effectively require the FCC to give accessibility complaints priority over all other complaints, regardless of merit, in order to meet the 180-day statutory deadline. The legislation would also give accessibility complainants mandamus rights unavailable in any other context, and empower the FCC to issue cease and

desist orders. CEA has proposed a more administratively realistic one-year period for resolving complaints that also provides the FCC sufficient remedial authority short of imposing a particular technical solution or standard.

The monetary forfeiture provisions of § 104(b) impose forfeiture amounts that are excessive and represent a substantial departure from current law, which for due process reasons imposes lesser amounts for businesses who are not ordinarily subject to FCC jurisdiction.

Further, the absence of a third party liability limitation is of particular concern given the market prevalence of third party applications that may or may not meet the accessibility needs of an individual user. The broad scope of the legislation, as well as the restrictions on impeding "content" transmitted via advanced communications, creates uncertainty regarding providers' and manufacturers' obligations to provide accessible products and applications. CEA proposes that the legislation clarify that advanced communications manufacturers and providers are liable only for the products and services they design and control.

Under Title II of the bill, the FCC is directed to develop regulations through a Notice of Inquiry and subsequent rulemaking that would require all devices to render closed captioning, video description and emergency alert information. Mandating the incorporation of technical standards and features to render closed captioning and video description without any consideration of the impact it would have on the other functions of or costs of a multipurpose device would undoubtedly stifle innovation.

As an alternative, CEA has proposed the development of an advisory committee consisting of all affected stakeholders working together to develop industry-led technical solutions for IP-based video programming services and devices. After the advisory committee

completes its work and develops suggested solutions, the advisory committee would then determine whether to recommend that the FCC promulgate rules to accomplish the recommended solutions. For any such requirements, the FCC would also be afforded flexibility to exempt certain Internet-based video programming services and devices.

It is also important to note that we are working on solutions for closed captioning of video content distributed over broadband networks. Last November, an Ad Hoc Group was formed by a Technical Committee of the Society of Motion Picture and Television (SMPTE) to continue the efforts of the Internet Captioning Forum and develop a voluntary industry standard. Group participants include content providers, broadcasters, captioning and subtitling solution providers, professional equipment manufacturers and consumer electronics manufacturers. SMPTE has reached out to the disability community and established formal liaison with COAT to exchange information, solicit feedback and ensure the needs of disabled individuals are taken into account during the development of this standard. The Ad Hoc Group expects to complete work on its first set of standards in 2010.

Finally, the bill requires a prescriptive list of user interfaces on devices, such as closed captioning buttons on remote controls and audio output of on-screen menus. The industry is working on solutions to make user interfaces more easily accessible. CEA recently established a new group to develop a recommended practice to make remote controls more usable by the visually impaired. We strongly believe it is not appropriate for the government to be in the product design business down to the level of individual buttons and functions.

Over the past year, we have met regularly with members of COAT to gain a better understanding of the problems they are attempting to solve with this legislation. Through these

meetings, in addition to gaining a better understanding of their concerns that has helped us craft suggested amendments to H.R. 3101, it became clear that there is need for better communication of the accessible products and services that are available in the marketplace. With this in mind, we applaud the provision establishing a clearinghouse of information on the availability of accessible products and services. The development and promotion of a clearinghouse would provide great value to the disabled community, who may not know what solutions are available. Additionally, it would provide an inventory of accessible technology available in the marketplace, enabling us to determine where we are meeting the needs of the disabled community and where we need to do better.

We are encouraged by the recent establishment of the FCC's Accessibility and Innovation Forum that will provide an ongoing collaborative discussion between diverse stakeholders to promote innovative solutions to access broadband communication technologies. The FCC also recently announced that they plan to launch an online clearinghouse to serve as an information source for accessible technologies, services and resources. Further, CEA has been an active participant in the FCC Consumer Advisory Committee and the FCC Digital Closed Captioning and Video Description Technical Working Group.

In closing, we have and will continue our efforts to ensure that all Americans are able to reap the benefits of new and emerging communications technologies. However, due to the layers of complexity inherent in the legislation and the limitations it would place on the advancement of all new technologies, we do not believe, as currently drafted, it is the right approach. We have submitted suggested alternative language that improves accessibility to Internet-based communication and video technologies while balancing the need to allow innovation to flourish.

We look forward to working with all interested stakeholders on a legislative approach that reflects the rapid innovation of our market with the desire to ensure that these products and services are accessible to persons with disabilities.

Mr. BOUCHER. Mr. Assey.

STATEMENT OF JAMES ASSEY

Mr. ASSEY. Good morning. Thank you. Thank you, Chairman Boucher, Ranking Member Stearns, and members of the subcommittee. I appreciate the invitation to testify before you today on H.R. 3101, the 21st Century Communications and Video Accessibility Act.

As you know, NCTA represents cable operators that serve over 90 percent of the Nation's cable households, providing voice, video, and data services, as well as over 200 cable networks that create and produce high-value video programming. And as leading providers of innovative communications and video services, we share the goals and objectives of H.R. 3101 to ensure that IP-based video, voice, and data services are accessible to those with visual and hearing disabilities.

Over the past several months, we too have had productive discussions with many of the advocacy groups to identify issues, to exchange information, and generally to learn about developments in assistive technology. In addition, NCTA is actively engaged in organizations and standard setting bodies that focus on disability access issues. Accordingly, we applaud the provisions in this legislation and in the national broadband plan that seek to promote similar kinds of dialogue in exchange through industry forms and information clearinghouses.

Having made that broad point, let me focus the rest of my comments on three areas in Title 2 of the legislation where we believe progress can be made if modifications are similarly made to improve the bill, and more importantly, to better support, the collaborative efforts that are necessary to design, develop and bring to market new assistive technologies.

The first area focuses on closed captioning for persons that are hearing impaired. For some time, cable companies have complied with existing FCC rules that require closed captioning on television programming. But clearly as technology has evolved and as investment has fueled the development of broadband networks, cable programming is increasingly available over the Internet. And to their credit, cable programmers have stepped up to the challenge and worked to translate TV captions to Internet formats that can be viewed on various Internet players. But today, that translation can be a cumbersome process. An additional technology barrier that we face is the fact that many of these Internet players are on proprietary formats which require multiple steps in order to have your programming accessible online.

But the good news is that help is on the way. Over the past 2 years, cable programmers and operators have participated in an ad hoc group with the Society of Motion Picture and Television Engineers, also known as the SMPTE Group to work towards the development of standards that are designed to make the translation to Internet captions more seamless and to eliminate the need to caption programming multiple times. In light of this ongoing work, we would propose the provisions expanding captioning requirements to the Internet be tailored to recognize and not compete with this inner industry standard setting effort. In addition, we believe that

further revision should be made to limit the scope of new obligations to TV programming that is distributed online and to phase in such obligations over time so that certain operational issues such as when TV programming has to be edited before it is made available on line can be occur.

The second issue I wish to discuss is that of video description. While we continue to have significant concerns about the utility, the cost and the operational complexity of distributing video described programming, the cable industry would propose starting with reinstatement of the SEC's prior video description rules with certain modifications and with sufficient time afforded to implement such requirements. Such a tailored, pragmatic approach will provide needed time to refresh old rules, to secure permissions, adjust budgets to deal with the operational and technical complexities of implementation at a greater scale. But given such uncertainty, we similarly believe that it would be premature for Congress to expand the FCC's authority in this area beyond the scope of its prior rules until after it has evaluated the impact of such requirements.

Third, we similarly believe that progress will be made with respect to cable menus and program guides. We can make them accessible through solutions that provide textual information in an audible form. But these solutions are in their nascent stage and operators must be given the time and flexibility needed to design and develop solutions and moreover, these solutions need to be based on functional objectives to avoid locking in any technology specific approaches.

Mr. Chairman, we know as Chairman Waxman said that more can and should be done to improve the accessibility of our products and services for persons with disabilities. And we have no doubt that there are technical and operational complexities that we will face along the way. But we also know that now is not the time to throw up our hands. Now is the time to roll up our sleeves and we stand ready to work with you on achieving pragmatic solutions. Thank you.

Mr. BOUCHER. Thank you very much, Mr. Assey. Mr. Franklin.

[The prepared statement of Mr. Assey follows:]

TESTIMONY OF JAMES M. ASSEY
EXECUTIVE VICE PRESIDENT
NATIONAL CABLE & TELECOMMUNICATIONS ASSOCIATION

on
H.R. 3101, the Twenty-First Century Communications and Video Accessibility Act of 2009

before the

Committee on Energy and Commerce
Subcommittee on Communications, Technology, and the Internet

UNITED STATES HOUSE OF REPRESENTATIVES
WASHINGTON, D.C.

June 10, 2010

TESTIMONY OF JAMES M. ASSEY

EXECUTIVE VICE PRESIDENT, NATIONAL CABLE & TELECOMMUNICATIONS ASSOCIATION

Good morning, Chairman Boucher, Ranking Member Stearns, and Members of the Subcommittee. My name is James Assey and I am the Executive Vice President of the National Cable & Telecommunications Association. Thank you for inviting me today to testify on H.R. 3101, the Twenty-First Century Communications and Video Accessibility Act of 2009.

NCTA represents cable operators serving more than 90 percent of the nation's cable television households and more than 200 cable program networks. The cable industry is the nation's largest provider of residential high-speed Internet service, having invested more than $160 billion since 1996 to build two-way, interactive networks with fiber optic technology. Cable companies also provide state-of-the-art digital telephone service to more than 20 million American consumers. NCTA and its members are committed to making their services available to all Americans, and we support the objective of H.R. 3101 to ensure that IP-based voice, broadband, and video services are accessible to the visually- and hearing-impaired.

Cable industry representatives are actively involved in ensuring that the needs of our customers with disabilities are addressed. Today, our voice offerings comply with Section 255's accessibility requirements, and cable operators contribute to the Telecommunications Relay Service Fund. Our video programming is closed captioned in accordance with the FCC's rules. Moreover, cable programmers increasingly are providing this programming online with captions, and some cable programmers continue to voluntarily provide some video-described programming. In addition to these steps, we remain actively engaged in organizations and standards development activities dedicated to working on disability issues. For example, NCTA

is pleased to participate in forums focused on accessibility solutions like this year's 25th Annual International Technology & Persons with Disabilities Conference that was held in San Diego, California. In addition, NCTA and Comcast have been working with the FCC, through its Technical Working Group on Closed Captioning and Video Description, to help make sure that the transition from analog to digital programming does not disrupt our customers' ability to continue to enjoy captioned video programming.

We agree that more can and should be done. In that regard, discussions surrounding this bill have played a positive role in helping the cable industry better understand the needs and goals of cable consumers with disabilities. Along with representatives of other industry organizations with an interest in this legislation, NCTA has actively participated in discussions for several months with the Coalition of Organizations for Accessible Technology (COAT) about the provisions of H.R. 3101. Cable operator engineers have met with COAT and its technical experts to exchange information and learn about technological developments in assistive technology. We hope to continue our positive dialogue with COAT and with the Committee to ensure any legislation considered addresses the needs of the disability community, but also takes into consideration the impact on industry. We want to continue to be a productive participant in these ongoing discussions to identify solutions and to best achieve concrete results.

Our dialogue with COAT has helped us not only better understand the needs of consumers with hearing and visual disabilities, but has also brought to light certain elements of H.R. 3101 that we believe can achieve accessibility goals through a more pragmatic approach. I would like to highlight a few of the areas where we would suggest such changes.

First, cable operators are committed to working to find solutions to the accessibility of menus and program guides provided for digital multichannel video programming. In light of the

nascent stage of development of accessible solutions, NCTA suggests amending the bill to make clear that operators should have the needed time and flexibility to design and develop the technology required to provide audible versions of their guides and menus for the blind and visually impaired.

Second, we recognize that the Internet is becoming an increasingly significant source for viewing video programming, and we are committed to making online video as accessible as possible. Cable programmers and operators are participating in an Ad Hoc Group within the Society of Motion Picture and Television Engineers (SMPTE) working to resolve the technical barriers that currently prevent captioning from accompanying the video content when it is moved from television to online delivery. We believe we can successfully overcome these challenges in the near future, so that programming captioned for television viewing can more easily retain the captions when distributed over the Internet and does not have to be captioned multiple times to accommodate different online formats. When the SMPTE process is complete and a standard is finalized, use of that standard can be incorporated into programming going forward. NCTA proposes that Internet captioning requirements be timed to reflect the ongoing standard-setting process and apply prospectively to programming distributed online.

We also propose a phase-in of Internet captioning obligations that reflects the different levels of difficulty associated with captioning programming online. For example, if a program is edited for Internet distribution (e.g., the commercials are removed, scenes are eliminated or added, other elements such as the music are replaced), the captions may need to be reformatted or redone, and we have suggested some additional time to ensure edited programming is captioned online. While we anticipate that most programming eventually will be able to seamlessly move from television to the Internet with captions, it will be more difficult for some

types of programming. The bill should thus allow some necessary leeway to address some likely technical glitches and other unusual situations that may occur.

Third, the challenges we face in providing video description, both over television and the Internet, are more difficult. There are technical and operational difficulties, as well as significant costs (which far exceed those for captioning) and creative issues associated with providing video described programming. Despite these challenges, the cable industry would agree to the reinstatement of the FCC's earlier video description requirements on television, with certain modifications. Much has occurred over the decade since the rules were eliminated, and we ask that legislation give the industry sufficient time to provide video-described programming. This time is necessary to incorporate the provision of video description into budgets and program production plans and to ensure that programmers and operators have the right equipment in place to provide video-described programming. Because of the significant questions that remain about the utility of, and difficulty of providing, video description, it is premature to provide the FCC authority to expand the scope and coverage of the rules. Instead, we believe the FCC should study the associated issues and report back to Congress.

Finally, while we generally support Title I of the bill ("Communications Access"), we share some of the concerns raised by other industry groups. In particular, we would suggest changes that clarify the scope and application of Title I to reflect the difference between the IP environment and the old circuit-switched world in which accessibility requirements were first imposed. As we move increasing to an IP environment, the service provider and the network operator may be two different entities that have no direct contact with one another. This is much different than the pre-IP world, where the network operator was the service provider (such as in the case of traditional voice telephone service). Consequently, a network operator may have no

control over whether the application provider that is actually providing the communications service complies with accessibility requirements. Congress needs to clarify the respective accessibility responsibilities of IP network operators and applications providers – or expressly direct the FCC to do so – and ensure that network operators functioning solely as passive conduits for third party services providers are not made responsible for compliance by those providers. We would be happy to work with you to fashion language to accomplish these goals.

Thank you again for the opportunity to appear this morning on this very important matter. We look forward to working with you on H.R. 3101.

STATEMENT OF BOBBY FRANKLIN

Mr. FRANKLIN. Thank you, Chairman Boucher, Ranking Member Stearns and members of the subcommittee. Thank you for the opportunity to be here this morning. I am Bobby Franklin, and I serve as executive vice president for CTIA, the wireless association. Your former colleague, Steve Largent, wanted to be here today, but he is on his way to Oklahoma where one of his sons will be married this weekend. In Steve's absence, I am here to share CTIA's thoughts on the best way to ensure that emerging wireless broadband services and devices meet the needs of every American. At the outset, let me say that we are proud of the commitment CTIA's members have displayed to making accessibility a priority. From the enactment of Section 255 in 1996 to today, the evolution and capability has been significant and it is getting better all the time.

Turning to H.R. 3101. We agree that it makes sense to extend the sort of protections incorporated in section 255 of the communications act to emerging services and devices. Over the last several months, CTIA has had extensive discussions with COAT, and I am pleased to report that there are a number of areas such as hearing aid compatibility requirements and the need for an accessibility clearinghouse where we are in agreement. There are, however, several areas where we have not yet reached agreement and it is on those issues where I would like to focus the balance of my statement.

First, we believe the standard under which our members have operated since enactment of the 1996 Act, a standard that requires equipment and services to be accessible and usable if readily achievable continues to be logical and proper standard to apply to any new obligations. As a practical matter, when our members introduce new accessibility and functionality features today, even though those functions may not be required by Section 255, they are doing so under the readily achievable standard. The increasing availability of accessibility features and the absence of complaints filed with the FCC is strong evidence that the standard is working and Congress should stick with it.

Second, we urge the committee to consider language to clarify the limits of any new accessibility obligations. In the walled garden that characterized wireless offerings just a few years ago, it made sense to assign the responsibility for accessibility to carriers and manufacturers, however, the evolution toward open platforms and significantly enhanced consumer choice means that carriers and manufacturers have less and less control over service, programs and applications that may be used by consumers. While our members strive to make the products and services they offer accessible, new law in this area should clarify that they are not responsible for applications provided by third-parties, which increasingly occurs without any knowledge on the part of the carrier or the handset maker.

Adding limitations on liability for third party actions would be consistent with this committee's approach in areas such as copyright protection, online pharmacy regulation, data security protection and Wall Street reform. The committee made an effort in those initiatives to clarify that a service provider is not liable for the ac-

tivities of third-parties and that same limiting principle should apply in this instance as well.

Finally, CTIA urges the committee to streamline the bill's reporting requirements. As proposed, these requirements would be costly, raise competitive and confidentiality concerns and do little to provide consumers with useful information about the accessibility features available in wireless products and services. CTIA suggests that the committee consider an approach that would require service providers and manufacturers to maintain records of efforts they have undertaken to implement any accessibility requirements Congress may impose and to produce those records upon receipt of a request by the FCC if a complaint is filed. We believe the bill's proposed accessibility clearinghouse which CTIA and COAT both support will do much more than annual filings to ensure that consumers find the right devices to meet their unique needs.

We believe these suggestions will improve H.R. 3101 and produce a framework that will work for our members and those that need enhanced access to emerging wireless broadband services. We will, of course, be pleased to provide the committee staff with specific legislative proposals that address each of these suggestions. Thank you again for the opportunity to be at today's hearing. I look forward to questions.

Mr. BOUCHER. Thank you, Mr. Franklin.

[The prepared statement of Mr. Franklin follows:]

TESTIMONY OF
BOBBY FRANKLIN
EXECUTIVE VICE PRESIDENT
CTIA – THE WIRELESS ASSOCIATION®

BEFORE THE U.S. HOUSE OF REPRESENTATIVES
SUBCOMMITTEE ON COMMUNICATIONS, TECHNOLOGY AND THE INTERNET

June 10, 2010

Good morning, Chairman Boucher, Ranking Member Stearns, Representative Markey and members of the Subcommittee. My name is Bobby Franklin, and I am the Executive Vice President of CTIA – The Wireless Association® ("CTIA"). Thank you for affording me this opportunity to share with you the views of CTIA on H.R. 3101, the Twenty-first Century Communications and Video Accessibility Act of 2009.

Today, my comments will highlight the significant contributions the wireless industry is making to enhance the way we all communicate, including persons with disabilities. CTIA believes that access to wireless products and services is being advanced through readily achievable and technologically feasible solutions. We are equally committed to continuing collaborative initiatives with the accessibility community that help industry to identify, prioritize and address accessibility in wireless products and services.

Throughout the legislative process, CTIA and other industry representatives have actively worked with the Coalition of Organizations for Accessible Technologies ("COAT") regarding the need to update current accessibility laws as they apply to communications equipment and services. While CTIA continues to believe the wireless industry is meeting the needs of persons with disabilities, we recognize that as the communications industry

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innovates we must continue to ensure the needs of all our consumers are met. CTIA supports many of the provisions in H.R. 3101 but has serious reservations about whether the bill's accessibility standard, reporting requirements and other provisions are the appropriate ways to ensure innovative wireless products and services continue to meet the needs of persons with disabilities.

I. THE WIRELESS INDUSTRY PROVIDES CHOICE AND OPPORTUNITIES FOR PERSONS WITH DISABILITIES UNDER CURRENT ACCESSIBILTIY REQUIREMENTS AND MARKET-DRIVEN INITIATIVES

Over the last quarter century, wireless devices and services have become central communications, information and safety tools for persons with diverse abilities. In the National Broadband Plan, the Federal Communications Commission ("FCC" or "Commission") recognized the important contribution wireless technologies provide the accessibility community and we agree with the Commission that accessible mobile broadband technologies are a "big deal" for all Americans.[1] Indeed, the FCC noted that industry innovation and collaborative efforts offer tremendous potential for persons with disabilities.[2]

Today, as the result of a robust and competitive wireless ecosystem, U.S. consumers have the kind of choice and value that consumers around the world strive for. U.S. wireless companies serve more than 285 million active subscriber connections and offer consumers access to more than 600 unique wireless devices.[3] As mobile broadband availability and smartphone penetration have grown, so too has the number of applications that are available

[1] FEDERAL COMMUNICATIONS COMMISSION, CONNECTING AMERICA: THE NATIONAL BROADBAND PLAN 181, CHAPTER 9 (2010) ("National Broadband Plan"), http://www.broadband.gov/plan/; *see also,* Elizabeth Lyle, *A Giant Leap & A Big Deal: Delivering on the Promise of Equal Access to Broadband for People with Disabilities*, FCC OBI Working Paper Series, 13 (April 2010) ("FCC Accessibility White Paper").

[2] *FCC Accessibility White Paper* at 12.

[3] CTIA Wireless Industry Indices Report: Year-End 2009 (rel. Mar. 2010), *available at* www.ctia.org.

for use on the mobile platform. While the first "app" store launched in July 2008, today, there are more than 240,000 applications ("apps") available from seven different stores.[4]

This innovative and competitive mobile ecosystem has provided benefits to persons with disabilities unmatched in other communications industries. In fact, the market for accessible wireless products has evolved significantly in just the two years since CTIA last came before this Subcommittee to describe the wireless industry's accessibility efforts.[5] As a result of the wireless industry's collective commitment to key accessibility issues, barriers to adoption of wireless – such as cost and accessibility – have been reduced and satisfaction with the wireless industry has increased. According to a recent survey by the Rehabilitation Engineering Research Center for Wireless Technologies ("Wireless RERC"), more than 86 percent of individuals with disabilities own or have access to a wireless communications device and, after voice communications, text messaging, e-mail, and Internet access are the most important uses of a wireless device among people with disabilities.[6]

CTIA has continuously demonstrated that innovation and competition throughout the wireless ecosystem provides benefits to the accessibility community, as carriers compete to offer service plans and accessible software specifically for persons with disabilities.[7]

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[4] Written Ex Parte Communications of CTIA-The Wireless Association, WT Docket No. 09-66, GN Docket No. 09-157, and GN Docket No. 09-51 at 9-10 (April 29, 2010); Steve Jobs, Chief Executive Officer, Apple, Inc. Keynote Address at the Apple World Wide Developer Conference 2010 (June 7, 2010) *available at* http://events.apple.com.edgesuite.net/1006ad9g4hjk/event/index.html.

[5] Testimony of K. Dane Snowden, Hearing on Twenty-first Century Communications and Video Accessibility Act, HR. 6320, Subcommittee on Telecommunications & the Internet, U.S. House of Representatives, 110th Congress (May 1, 2008).

[6] Wireless RERC, Second Report: Findings of the Survey of User Needs (SUN) for Wireless Technology 2007-2009, 5 (March 2009) ("Second SUN for Wireless Technology 2007 – 2009"); *see also*, Broadband Expanded, *Disabilities – Stats, Data & Observations*, NEW YORK LAW SCHOOL (June 2010) *available at* http://www.broadbandexpanded.com/policymakerfiles/disabilities/Disabilities_Stats&Data.pdf.

[7] *See*, AT&T, Text Accessibility Plans (TAP), http://www.wireless.att.com/learn/articles-resources/disability-resources/disability-resources.jsp (last visited June 5, 2010); Sprint Relay Data Only Plan, http://sprintrelaystore.com (last visited June 5, 2010); T-Mobile Smartphone ® Plans www.sidekick.com (last visited June 5, 2010); U.S. Cellular, Deaf and Hard of Hearing/Text-Only Calling Plans,

Moreover, competition is vigorous among manufacturers to increase market share and serve persons with disabilities by incorporating "built-in" accessibility features, including text-to-speech and screen readers, Hearing Aid Compatibility ("HAC"), support for Tele-Typewriters ("TTY") and Assistive Technology ("AT"), predictive text, word completion, voice-activated features and closed-captioning.[8] Persons with disabilities can now find innovative, lower-cost mobile devices and services to replace expensive, immobile assistive communication devices.

This era of intense competition, innovation and investment in the mobile communications marketplace has occurred under Section 255 of the Communications Act's "readily achievable" standard, a regulatory regime that has provided the wireless industry flexibility to respond to market demands and regularly incorporate new accessibility features into existing equipment based on technologically feasible solutions.[9] When Section 255 was enacted, the only types of AT available to make mobile and wireline phones accessible were

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http://www.uscellular.com/uscellular/common/common.jsp?path=/plans/text-only.html (last visited June 5, 2010); Verizon Wireless, Nationwide Messaging Plans, http://aboutus.vzw.com/accessibility/index.html (last visited June 5, 2010).

[8] *See* Apple, Inc., www.apple.com/accessibility/ (last visited June 5, 2010); Motorola, Inc., www.motorola.com/accessibility (last visited June 5, 2010), Nokia, Inc. http://www.nokiaaccessibility.com/ (last visited June 5, 2010); RIM, Inc., BlackBerry Accessibility http://na.blackberry.com/eng/support/devices/blackberry_accessibility/ (last visited June 5, 2010); National Center for Accessible Media ("NCAM"), Captioning Solutions for Handheld Media and Mobile Devices - Device Comparison Chart http://ncam.wgbh.org/invent_build/web_multimedia/mobile-devices/devices (last visited June 5, 2010).

[9] Section 255 of the Communications Act requires that a covered product or service must be accessible to the extent "readily achievable", and if it is not accessible, must be "compatible with existing peripheral devices or specialized customer premises equipment commonly used by individuals with disabilities to achieve access, if readily achievable." 47 U.S.C. § 255(b)-(d). "Readily achievable" is defined as "easily accomplishable and able to be carried out without much difficulty or expense" and incorporates four factors to be considered in determining whether an action is readily achievable. 42 U.S.C. § 12181(9).

items such as TTYs, handset amplifiers, and telecoil loops, which required the wireless industry to devote significant resources to ensure compatibility.[10]

Today, text-based wireless services, such as SMS ("short message service"), e-mail or IM ("Instant Messaging"), are more commonly used by persons with disabilities than TTYs, and mainstream accessories for mobile devices, such as Bluetooth® keyboards and headsets, provide AT benefits without incorporating specific hardware.[11] Additionally, as the FCC described in its recent White Paper, manufacturers are incorporating accessible features into their application requirements which is encouraging increasing numbers of third-party applications to utilize built-in accessibility features, often yielding more efficient and affordable accessibility solutions than dedicated AT devices.[12]

For example, "LookTel", which CTIA awarded a 1st Place Emerging Technology Award at CTIA Wireless 2010®, is a downloadable application to help visually impaired or blind users identify everyday objects and landmarks by utilizing a device's built-in touch-screen and camera features.[13] There is also "iCommunicate", an Augmentative & Alternative Communication ("AAC") application that uses a wireless device's built-in touch-screen and audio output features to make customized storyboards and visual schedules for children with developmental delays and autism.[14] In addition to the many other applications dedicated to

[10] The Federal Communications Commission's rules require that wireless devices and services must be capable of transmitting 9-1-1 calls from individuals with speech or hearing disabilities through the use of TTY devices. 47 C.F.R. § 20.18(c).

[11] Wireless RERC, *Second SUN for Wireless Technology 2007 – 2009* at 9.

[12] *FCC Accessibility White Paper* at 13.

[13] http://www.looktel.com/ (last visited June 5, 2010).

[14] Wheelchair Diffusion Blog, *The iPad Disability Connection* (April 16, 2010) *available at* www.usatechguide.org/blog/the-ipad-disability-connection (last visited June 5, 2010).

accessibility, mainstream applications from Twitterific to Slacker Radio to Mashable and Facebook are utilizing the built-in accessibility features of mainstream mobile devices.[15]

CTIA believes these "app" solutions are just the beginning of a mobile revolution that allows persons with disabilities to access the wireless products and services of their choice. The accessibility community also recognizes the substantial efforts the wireless industry has taken to address accessibility via designing "built-in" features, compatibility with AT, and providing application programming interfaces ("API") to encourage the development of accessible "apps."[16]

Persons with disabilities are benefiting substantially from wireless services that are improving quality of life opportunities in employment, education, health care, and public safety.[17] A recent article in PCWorld highlighted how Apple's iPad has built-in accessibility features and available third party accessibility applications which can help employers efficiently comply with requirements under the Americans with Disabilities Act ("ADA").[18] For example, as the FCC recently noted, a dedicated AAC device may cost $8,000 or more,

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[15] Maccessibility.net, *iPhone – Accessible Apps*, http://maccessibility.net/iphone/apps/# (last visited June 5, 2010).

[16] Darren Burton, *Can an Android Make Your Mobile Phone Accessible?* and *A Review of Oratio: A Screen Reader for BlackBerry*, Vol. 11 AMERICAN FEDERATION OF THE BLIND ACCESSWORLD No. 2 (May 2010) http://www.afb.org/afbpress/pub.asp?DocID=aw110202 (last visited June 5, 2010); Press Release, National Federation of the Blind, *National Federation of the Blind Commends Apple for Including VoiceOver on iPad* (Jan. 28, 2010) *available at* http://www.nfb.org/nfb/NewsBot.asp?MODE=VIEW&ID=545 (last visited June 5, 2010).

[17] Comments of CTIA – The Wireless Association®, *NBP Public Notice #4- Broadband Accessibility for People with Disabilities Workshop II: Barriers, Opportunities, and Policy Recommendations*, GN Docket Nos. 09-47, 09-51, 09-137 (filed Oct. 6, 2009); *see also,* Broadband Expanded, *Disabilities – Stats, Data & Observations,* NEW YORK LAW SCHOOL (June 2010) *available at* http://www.broadbandexpanded.com/ (last visited June 5, 2010).

[18] Tony Bradley, *Apple iPad Helps Businesses Meet Needs of Disabled Employees*, PCWorld (March 29, 2010) *available at* http://www.pcworld.com/businesscenter/article/192800/apple_ipad_helps_businesses_meet_needs_of_disabled_employees.html; *see,* The Americans with Disabilities Act of 1990, Pub. L. No. 101-336, 104 Stat. 327 (1990) (codified at 47 U.S.C. §225) ("ADA Title IV"); *see also*, Comments of CTIA – The Wireless Association®, *NBP Public Notice #3-Telework*, FCC GN Docket Nos. 09-47, 09-51, 09-137 (filed Sept. 22, 2009).

while a $300 smartphone can run $200 text-to-speech software and work more effectively than the AAC device.[19] CTIA supports H.R. 3101's allocation of Universal Service funds to promote broadband adoption among persons with disabilities who should be encouraged to use fund support to take advantage of increasingly accessible wireless feature phones, smartphones, netbooks, tablets and more. CTIA also supports the FCC's recommendation that healthcare policies in programs such as Medicare can utilize efficiencies in mainstream mobile technologies with built-in accessibility features or available third-party applications.[20]

Consumers with disabilities also place significant importance on wireless for communications during an emergency. The wireless industry and public safety communities has invested substantially in deploying Wireless E-911 ("Enhanced 9-1-1") service and designing wireless handsets to be TTY compatible for everyday and emergency communications.[21] Today, long-term and significant work is underway to transition our nation's 9-1-1 system to an IP-based 9-1-1 system that may have the capability to support direct voice, text and data communications access with careful attention to the needs of persons with disabilities.[22]

In the case of text-based communications to 9-1-1, specifically for the deaf or persons with hearing loss, CTIA believes all text-based communication formats should be

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[19] *FCC Accessibility White Paper* at 24.

[20] *FCC Accessibility White Paper* at 24.

[21] *See* Comments of CTIA – The Wireless Association®, *Wireless E911 Location Accuracy Requirements*, PS Docket No. 07-14 (filed July 5, 2007).

[22] Among other duties, the FCC's Communications Security, Reliability and Interoperability Council ("CSRIC") is required to "develop and recommend best practices to facilitate the communication of emergency information to the public, especially people with special needs such as people who do not speak English, individuals with disabilities, the elderly and people living in rural areas." Charter of FCC's CSRIC *available at* www.fcc.gov/pshs/docs/advisory/csric/csric-charter-final.pdf (last visited June 5, 2010); *see also*, National Emergency Number Association ("NENA"), NG9-1-1 Project, Operations Development – Accessibility Committee, http://www.nena.org/operations-committee-accessibility (last visited June 5, 2010).

considered. Reliance on a single solution, such as the current focus on TTY, may result in the solution being outdated as technology evolves, or in stagnation as innovation is impeded by a required adherence to an inflexible standard. The wireless industry is an active partner with the FCC, public safety representatives and the accessibility community in the necessary transition to Next Generation 9-1-1 ("NG9-1-1"), which may open untold accessibility features for all citizens, especially those with disabilities. As such, CTIA recommends against addressing these issues in the context of H.R. 3101.

While these examples highlight the potential of mobile devices for persons with disabilities today, the selection of a wireless device continues to be a highly personalized choice for every consumer based on a range of unique factors and product awareness, both of which are central to finding the right mobile device and service. Wireless carriers and manufacturers have taken a number of steps to educate the accessibility community and senior citizens about the plethora of available and affordable wireless products, services and features through company websites and direct outreach.[23] In addition, CTIA, along with our carrier and manufacturer members, provides information about accessible products and features at *www.AccessWireless.Org* and hosts the Wireless RERC's five-part video series to help consumers choose a HAC wireless device.

Today, consumers are better informed because of industry and accessibility community collaborative educational efforts, but more can be done to ensure consumers make informed choices when choosing from the variety of accessible wireless products,

[23] *See*, John P. Krudy, *Seniors Tackle Cell Phone Tech*, THE WASHINGTON TIMES (June 1, 2009) *available at* http://www.washingtontimes.com/news/2009/jun/01/seniors-tackle-cell-phone-tech/?feat=article_related_stories; *see also*, AT&T, National Center for Customers with Disabilities (NCCD), http://www.wireless.att.com/learn/articles-resources/disability-resources/nccd.jsp (last visited Oct. 2, 2009).

services, and "apps."[24] CTIA intends to participate in the FCC's *Accessibility & Innovation Forum,* which is being established to share best practices, hold workshops, and aggregate information about accessible products and solutions for consumers.[25] Collaborative processes have proven effective at addressing the fast-moving, innovative and ever-changing aspects of the wireless industry while providing persons with disabilities the information needed to make informed decisions. CTIA and its members are committed to continuing these and future collaborative initiatives in partnership with the accessibility community.

II. CONGRESS CAN BEST ENSURE ACCESSIBILITY FOR PERSONS WITH DISABILTIES BY ESTABLISHING FLEXIBLE ACCESSIBILITY STANDARDS WHICH ENCOURAGE MARKET-DRIVEN SOLUTIONS AND INDUSTRY AND CONSUMER COLLABORATIONS

a. *Consensus Support for Hearing Aid Compatibility (HAC) and Accessibility Clearinghouse Between Industry and COAT*

Throughout the legislative process, CTIA and other industry representatives have collaborated and actively worked with representatives of the accessibility community regarding the need to extend protections similar to those in Section 255 to IP-enabled services and devices. In addition to the overall goals of this legislation, which CTIA supports, the wireless industry and COAT agree on a number of provisions, including updating the current HAC requirements and establishing an accessibility clearinghouse. Specifically, the HAC language in S.3304 incorporates the COAT-industry consensus language which clarifies that HAC requirements apply to equipment that is intended to be

[24] Among all communications industries (wireline, cable, and wireless), the FCC's Consumer & Government Affairs Bureau reported receiving a limited number of accessibility complaints (773 total) during the period October 1, 2008 to September 30, 2009, including 98 (13%) for Section 255 generally, 210 (47%) for relay services, 436 (55%) for closed captioning, 24 (3%) for emergency information over video programming; and 5 (0.6%) which addressed wireless Hearing Aid Compatibility (HAC). FCC, Consumer & Government Affairs Bureau, Disability Rights Office, http://www.fcc.gov/cgb/dro/ (last visited June 5, 2010); FCC, Consumer & Government Affairs Bureau, Disability Rights Office, http://www.fcc.gov/cgb/dro/ (last visited June 5, 2010); *see also*, Wireless RERC, *Second SUN for Wireless Technology 2007 – 2009* at 7 and 12; Wireless RERC, *Hearing Aid Compatible Cellphones: Findings from the Annual Survey of Consumer Experiences*, 2006-2008 (May 2009).

functionally equivalent to a telephone, maintains existing HAC requirements, and establishes a process for the adoption and utilization of industry-developed technical standards in consultation with persons with hearing loss.[26]

CTIA also strongly supports the "Clearinghouse" and "Education and Outreach" provisions outlined in H.R. 3101. As previously discussed, there is a plethora of wireless devices and services that are currently available and under development that incorporate accessibility features and functions for persons with disabilities. Although CTIA and our members provide information about accessible products and services, CTIA believes that more can be done to ensure consumers are better informed about their choices.

For example, Sgt. Brian Pearce recently testified to the Senate Commerce Communications Subcommittee that he was unable to find a wireless device to meet his low vision needs, despite discussions with a wireless carrier's customer service representatives.[27] Subsequent to the Senate hearing, the wireless carrier reached out to Sgt. Pearce and determined that they will introduce a wireless handset specifically intended for use by senior-citizens, and persons and veterans with disabilities that may meet his needs. As demonstrated in this case, CTIA believes a central resource coupled with education and outreach regarding the availability of accessible products, services and solutions will help persons with disabilities navigate the diverse advanced communications marketplace.

b. CTIA Supports an "Achievable" Standard with Factors for Consideration Based on the Specific Product or Service Which Will Provide the Needed Flexibility and Certainty to Bring More Accessible Devices and Services to All Consumers

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[25] *See,* FCC, BlogBand, Disabilities Access, http://blog.broadband.gov/?categoryId=13843 (last visited June 5, 2010); *National Broadband Plan* at 181; *FCC Accessibility White Paper* at 28.

[26] Equal Access to 21st Century Communications Act, S. 3304, 111th Congress §102 (2010).

[27] Testimony of Sgt. Brian Pearce, U.S. Senate Commerce Subcommittee on Communications "Innovation and Inclusion: The Americans with Disabilities Act at 20" (May 28, 2010).

Foremost among CTIA's concerns with H.R. 3101 is the mandate that equipment and services shall be "accessible to and usable by individuals with disabilities" unless such accessibility and usability results in an "undue burden" on a manufacturer or service provider. CTIA supports extending the concepts underlying Section 255 of the Communications Act to Internet Protocol (IP)-based services and devices, but we believe that the standard under which our members have operated since enactment of the 1996 Telecommunications Act – a standard that requires equipment and services to be accessible and usable "if readily achievable" – is the logical and proper standard to apply to any obligations on new advanced communications products and services.

Both the "readily achievable" and "undue burden" standards originated in the ADA, but they apply in different contexts.[28] Under the ADA, the more flexible "readily achievable" standard is the one selected by Congress for determining whether existing structures, such as buildings and public accommodations, should have to be modified to be accessible, in recognition of the fact that retrofitting such structures is often difficult and costly. "Undue burden" carries a heavier obligation – it means that accessibility is required unless it would impose "significant difficulty or expense" – but it is applied more selectively and applies differently to government and private entities. For government entities, the "undue burden" standard applies to the accessibility of government "services, programs, or activities," which, while pre-existing, can be made accessible without necessarily making structural changes to existing facilities, although alterations may be required if there is no other way to make services, programs, or activities accessible. With respect to private entities, however, the "undue burden" standard applies only to "auxiliary aids" that are not

[28] The term "readily achievable" was introduced in Title III of the ADA and is defined as "easily accomplishable and able to be carried out without much difficulty or expense." 42 U.S.C. § 12181(9). Section 255 adopts this definition. 47 U.S.C. § 255(a)(2).

themselves pre-existing but are rather only add-ons that can be made accessible more easily than a physical structure.

The "undue burden" standard imposes substantial burdens, which is why Congress in the ADA limited its private sector applicability to auxiliary aids. Even to the extent the standard is applied to require the retrofitting of government buildings, the cost of such changes can fairly readily be amortized over the relatively long useful life of a building. By contrast, IP-based communication networks and associated consumer devices are changing constantly. The continuous introduction of new standards, new equipment, and new capabilities are the norm in this dynamic sector, and networks and devices are an ever-changing mix of old and new elements. For this reason, extending the "undue burden" standard beyond auxiliary aids to cover IP-enabled communications services and equipment would not only represent a departure from the carefully considered structure of the ADA, it would also potentially threaten innovation and discourage technological development because of the significant costs that would be imposed on providers each time the network or a consumer device or operating system were introduced, modified or upgraded.

By contrast, the "readily achievable" standard is the most appropriate standard for advanced communications services and equipment, just as it is for telecommunications networks and equipment. Neither networks nor equipment can properly be considered auxiliary aids. Rather, networks are pre-existing structures; even when they are upgraded they are not rebuilt from scratch but rather modified on an incremental basis. The same is true for equipment; "new" devices are often based on pre-existing platforms. In addition, in both cases, upgrades and features are added frequently. Requiring accessibility to be built into each such change would inhibit all changes.

As fast as technological development occurs in the wireless industry, bringing new products to market involves numerous variables and requires balancing technical limitations with trade-offs, flexibility, and creativity. The development of an information or telecommunications product to get it to market in a timely fashion is highly time-driven, but is also an iterative process, with new features being added or removed constantly in a series of small development and testing cycles determining what capabilities, dimensions, and other factors can realistically be put into a product that is capable of competing successfully in a highly competitive market. If developments in each of these cycles were viewed against a set of difficult-to-meet standards and the cost – from detailed record-keeping at all stages of product design and implementation to justify business decisions, to administrative and legal proceedings – of potentially huge liability, the innovation of new products and services could be seriously impeded.

Given the multiple, sometimes conflicting, needs of persons with different levels of ability, it is important that rules allow industry a level of flexibility that will ultimately lead to a greater number and variety of products to meet different user needs. Further, maintaining the "readily achievable" standard established in Section 255 promotes consistency in both the legislation and implementation efforts. Maintaining the same standard enables manufacturers and consumers to benefit from the design processes and procedures developed to implement Section 255 and now embedded in industry practices. Any change to the standard could result in a disruption to the planning and design process that could undermine manufacturers' efforts to bring accessible products to market in a timely manner.

Notwithstanding these reasons, should the Committee choose to depart from the template that has guided the industry successfully for almost a decade and a half, we strongly

urge you to not adopt the "undue burden" standard. A better approach would be to embrace the "achievable" standard incorporated in S. 3304 and add supplementary language to provide needed clarity and guidance to industry, the Commission, and consumers. The standard used in S.3304 would require manufacturers and service providers to determine which accessible solutions are "reasonable" rather than which solutions are "easy" to implement.

Additionally, CTIA urges that the legislation clarify that reasonableness determinations should focus on whether a proposed solution will "fundamentally alter" the individual product or service from its intended functionality. This guidance would address COAT's expressed understanding that not every wireless device or service available must consider every recognized disability to meet the goals of the legislation.

CTIA also recommends that if the "achievable" standard is employed, the standard incorporate recognized factors to provide clarity to industry, the Commission and consumers as to the process for determining whether accessibility is "achievable" with respect to a specific product or service. Consideration factors are recognized by industry and consumers as providing guidance for the determination of "reasonable" accessibility features in the design processes of specific products and services. It also would be consistent with established precedent under current accessibility standards in other contexts (i.e. the Americans with Disabilities Act and Section 508 of the Rehabilitation Act). The factors which CTIA proposes also recognize the increasing availability of accessible wireless solutions from third-party sources which offer opportunities for persons with disabilities and third-parties serving persons with disabilities previously unmatched in other communications industries.

c. *Provisions Limiting Liability from Third Party Sources Is Consistent with the Committee's Approach to Innovative Communications Products and Services*

Beyond the need to clarify the standard, we urge the Committee to incorporate provisions which clarify the limits of any new accessibility obligations on manufacturers and service providers. In the "walled garden" environment that characterized wireless offerings just a few years ago, it was perhaps reasonable to assign the responsibility for accessibility to wireless carriers and manufacturers and think that the issue had been fully addressed. Now, as the wireless ecosystem continues to evolve toward open platforms, significant operating system competition, and greater consumer choice and control, service providers and handset manufacturers have limited control over services, programs, and applications which may be downloaded by consumers. While CTIA accepts that its members should make the products and services they offer accessible, we believe new law in this area should clarify that they are not responsible for applications provided by third-parties, often and increasingly without any knowledge by the carrier or manufacturers.

Adding language to the bill which imposes limitations on liability for third-party actions would be consistent with the Committee's approach in other legislative contexts, including the Digital Millennium Copyright Act (P.L. 105-304), the Ryan Haight Online Pharmacy Consumer Protection Act (P.L. 110-425), and several pending pieces of legislation, including H.R. 2221 (the "Data Accountability and Trust Act") and H.R. 4173 (the "Wall Street Reform and Consumer Protection Act"). In each of these Acts or bills, the Committee has made an effort to make it clear that a service provider is not liable for all electronic communications by a third party which are transmitted, routed, or stored in intermediate or transient storage by such service provider. That same limiting principle should apply in this instance as well.

d. *Reporting Obligations Should Focus on Tools Helpful for Consumer Awareness of Available Accessible Products and Services Rather Than Developing a Record for Enforcement*

CTIA also urges the Committee to streamline H.R. 3101's proposed reporting requirements. While we understand that there may be instances in which the Commission will request access to service provider or equipment provider records, the reporting requirements proposed in the current legislation would do little to provide consumers with the information they need to make informed choices about available wireless products and services. Instead, the proposed reporting requirements, which require every entity offering advanced communications products or services to make annual filings, would be burdensome, raise competitive and confidentiality concerns, and, given the time lag that is often associated with other Commission data collection and reporting practices, fail to produce information that is useful to the public in a timely manner.

A better approach would be to require advanced communications service providers and manufacturers to maintain, in the ordinary course of business and for a reasonable time period, records of the efforts they have taken to implement the accessibility requirements imposed by the bill. These records could be produced upon receipt of a request by the Commission. In addition, the clearinghouse and education and outreach provisions of this bill would better serve the accessibility community by providing timely, relevant information which will help them to navigate the diverse wireless marketplace.

e. *A Real Time Text Advisory Committee is Unnecessary in Light of Current and On-Going Government and Industry Efforts*

CTIA and its member companies strongly support providing persons with disabilities equal access to emergency services, whether 9-1-1, mobile alerts or other critical services. While there can be considerable value in delegating complex technical matters to an advisory committee, the real-time text advisory committee created by this legislation largely

duplicates existing industry, Commission and international efforts. For example, the FCC's National Broadband Plan recommends the FCC initiate a Notice of Inquiry on the replacement of TTY with real-time text (RTT) and a subcommittee of the FCC's Communications, Security, Reliability and Interoperability Council is charged with studying the feasibility of text based communications to 9-1-1.[29] Furthermore, the Canadian Radio-television and Telecommunications Commission (CRTC)., the equivalent of the FCC in Canada, recently accepted the report of a technical subcommittee which found that "text messaging to 9-1-1 (T9-1-1) via SMS, IM, RTT, and IP Relay technology are not viable solutions at this time for people with hearing or speech disabilities to access 9-1-1 call centres."[30]

CTIA understands that consumers with disabilities place significant importance on wireless for communications during an emergency, which is why we support the long-term and significant work already underway to transition our nation's 9-1-1 system to an IP-based 9-1-1 system that may have the capability to support direct voice, text and data communications access with careful attention to persons with disabilities. However, we are concerned that the Emergency Access and Real-Time Text Advisory Committee proposed in H.R. 3101 could potentially impede these ongoing efforts, as well as the unknown variable of mandating one particular standard on a technology that is relatively new and will continue to

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[29] *See, National Broadband Plan*, Chapter 16, Recommendation 16.15 (recommending the FCC "initiate an additional proceeding to address how [Next Generation 9-1-1] can accommodate communications technologies, networks and architectures beyond traditional voice-centric devices."); *FCC Accessibility White Paper* at 31 (recommending the FCC "coordinate its work with Next Generation E-911 efforts to implement a real-time, interoperable voice, video, and text E-911 system."); *see also, Charter of FCC's CSRIC, supra* note 22.; *see also*, National Emergency Number Association ("NENA"), NG9-1-1 Project, Operations Development – Accessibility Committee, http://www.nena.org/operations-committee-accessibility (last visited June 5, 2010).

[30] Canadian Radio-Television and Telecommunications Commission - Interconnection Steering Committee *Improving access to emergency services for people with hearing and speech disabilities*, Telecom Decision CRTC 2010-224 (April 21, 2010) *available at* http://www.crtc.gc.ca/eng/archive/2010/2010-224.htm (last visited June 7, 2010).

evolve. As such, CTIA recommends against addressing these issues in the context of H.R. 3101.

IV. CONCLUSION

In a relatively short period, the wireless industry has evolved from the classic, voice-only "brick phone" to all-in-one mobile computers that offer voice, text, Internet, video, and thousands of applications, with each generation of device and service incorporating more accessibility features and functions than the last. We think this is a great story, and we're confident it will continue to get better with time. We look forward to working with the Committee to craft flexible, forward-looking policies which encourage this advancement while providing the accessibility community with assurances that they will not be left behind. Thank you for the opportunity to participate in today's hearing.

ATTACHMENT

Wireless Industry Accessibility Initiatives & Features
June 2010

Built-In Wireless Accessibility Features Under "Readily Achievable"[31]

Hearing/Speech	Visual/Blind	Cognitive	Physical
Push-based, real-time messaging (SMS/IM) Hearing Aid Compatibility (HAC) Closed Captioning (on select devices) Support for TTY/ 3rd Party Relay Services Support for Assisted Listening Devices Multimodal notifications, with extended vibration setting Visual Displays to Indicate Call Functions	Text-to-speech and screen readers Voice activation and control features Customizable font style, contrast, and "zoom" to magnify on-screen content Customizable shortcuts, hotkeys and icons Devices with physical keys and nibs Magnifiers using built-in camera features Alternate billing formats	Clickable touch screen Predictive text and Word completion (AutoText) Automation spell check Context-sensitive menus Programmable alarms and reminders Customizable fonts, themes and icons Visual voicemail Location based services	Multiple device form factors (touch, flip, candy bar, etc.) Non-slip side surfaces Clickable touch screen or hands-free functions Customizable shortcuts, hotkeys and icons Voice activation and control features Predictive text and Word completion (AutoText) Support for 3rd Party "AT" Alternate billing formats

Third Party Applications[32]

Beyond built-in accessibility features, many wireless devices and smartphones can be customized by adding or downloading applications (or "apps"). Third party developers may offer mainstream apps with accessibility features to entertain, inform or meet a consumer's specific accessibility needs including text-to-speech, screen readers, automated object recognition and Augmentative and Alternative Communication (AAC) functions which may be added to a wireless device at the consumer's choice.

[31] Features listed have been generalized to demonstrate the range of accessible features available on various wireless devices and handsets from wireless carriers or application providers.

[32] To date, there are more than 240,000 applications available on seven different stores which consumers have downloaded more than 4 billion times. *See* Written Ex Parte Communications of CTIA-The Wireless Association, WT Docket No. 09-66, GN Docket No. 09-157, and GN Docket No. 09-51 at 9-10 (April 29, 2010) *available at* http://files.ctia.org/pdf/filings/100429_CTIA_Rebuttal_Letter.pdf.

Mr. BOUCHER. And thanks to each of our witnesses this morning for your testimony. Let me also take this opportunity to thank each of you again for the collaborative conversations that we have underway. All of you are involved in those along with members and staff at the subcommittee level and our goal through those discussions is to achieve consensus and agreement on the legislation that our subcommittee should approve. I look forward to continuing our work with you on that. I am going to defer my questions momentarily and recognize the author of the legislation, the gentleman from Massachusetts, Mr. Markey for his round of questions.

Mr. MARKEY. Thank you, Mr. Chairman, very much. Sergeant Major Acosta, thank you so much for your service in protecting our country. Thank you so much for your service today in protecting millions of Americans who are sight and hearing impaired. We thank you for your continued service. Sergeant Major, you heard Mr. Shapiro. Mr. Shapiro is calling for a voluntary system, let the marketplace respond. You were here 2 years ago giving the same kind of compelling testimony. What would you say to Mr. Shapiro? He represents a coalition, the CEO of Microsoft, the CEO of Hewlett-Packard, the CEO of Sony are all part of his coalition. What would you say to the CEOs of these companies? What is your message to Mr. Shapiro and all of those CEOs that he is representing here today who are saying that they want a voluntary system?

Sergeant Major ACOSTA. Well, sir, thank you very much for that question. To elaborate a bit more, before we started with the hearing here, Mr. Shapiro introduced himself, said I am Gary Shapiro, pleasure to meet you, Sergeant Major Acosta, I am here to testify with you. And at that point in time, I had to stop him. Are you here with me or are you here against me? Because if I leave it in your hands, there is nothing to discuss. We are here to discuss a measure, H.R. 3101, which impacts the entire Nation, which will assist me and millions. I am not just here to represent myself. I represent American Council of the Blind, COAT and millions of blind individuals here in the United States of America. As you recall last year, we had approximately—we stated 10 million. I am sorry to say, sir, those numbers have doubled and more. They are not decreasing. They are increasing. Not just because of the diseases that are out there as you well know.

In some cases some of us who are coming back from the war zone are completely blind. We didn't expect to come home in this situation, but we have had to embrace it in order to move on with our life. So if you are asking me, sir, would I leave this measure in his hands or let the course take its only time to deal with these issues that we are introducing to you? Absolutely not, sir. It is imperative that this measure passes, H.R. 3101 means the world to us. It brings some sight back to us. It means a whole lot. It may bring back some of the hearing that we have lost and mind you, sir, I am a package deal.

I am almost like Apple. When I got hit, I suffered through traumatic brain injury. I lost my eyes. I lost my smell, my taste in addition to that, I lost some hearing. So I know what this measure means. As you can see, Mr. Shapiro hasn't lost a thing. Thank you, sir.

Mr. MARKEY. Mr. Shapiro, what would you say to Sergeant Major Acosta?

Mr. SHAPIRO. Well, first I thanked him first for his service to our country and it is obviously—you can't be a human being and not have an emotional response that I think we all share. What I am saying, though, is you cannot require every new product to be responsive to every disability and that is what the legislation you have written requires.

Mr. MARKEY. My bill does not do that, Mr. Shapiro. My bill does not require and you had an op ed yesterday which was very deceptive. My bill does not require that, and I wish you would just stop repeating that. It is untrue.

Mr. SHAPIRO. If you go to page 13 of the legislation, the sentence is pretty clear.

Mr. MARKEY. There is an undue burden provision in the legislation that allows for smaller companies, newer technologies to be able to escape. But if you can comply, if you can provide this technology, you must comply because Sergeant Major Acosta and millions of other Americans need accessibility to it. But there is an undue burden exception, Mr. Shapiro. And I just wish that you would keep that as part of your discussion and not have this broad brush as your op ed in The Washington Times yesterday suggested, "Bill seeks government control on features on every Internet device you use," "Dems want to redesign your iPhone." This man and people like this man—and there are millions of them. They are 90 years old. They are small children. They all deserve to have access to this technology, Mr. Shapiro. This is not helpful.

If the CEO of Microsoft and Hewlett-Packard and Sony is maintaining that they cannot meet this burden, then I just think they are dead wrong. I think they have the capacity to meet this burden and they should meet this burden. And they should be sitting here as well defending it, saying they can't do it, can't serve these people in the same way they served our country. And I am talking about the greatest generation all the way down to Major Acosta and small children right now across our country it is not just right.

Mr. BOUCHER. The gentleman's time has expired. And, Mr. Shapiro, you will have an opportunity. I am going to ask you some questions. The gentleman from Florida, Mr. Stearns, is recognized for his questions.

Mr. STEARNS. Thank you, Mr. Chairman. I think the gentleman from Massachusetts is creating an emotional bind here setting up a war hero against a person who is trying to legitimately point out there are some differences he feels are necessary to be made to the bill. And I think it is unfortunate that the gentleman from Massachusetts did that. He did the same type of thing with the V–Chip and we all know the V–Chip did not work. It was difficult to implement. It was confusing. I don't think there is probably one parent in this country that figured out how to program their computer.

Mr. MARKEY. Will the gentleman yield?

Mr. STEARNS. No, I won't yield.

Mr. MARKEY. It is not true.

Mr. STEARNS. It is true. It is overwhelming. You came out with the same emotional arguments on the V–Chip. You did the same type of thing. I think it is totally unfair for you to set up a war

hero with a CEO of an association and try to play that emotional game that you do continually.

So, Mr. Chairman, I think we should allow Mr. Shapiro to speak. He is not saying he wants all voluntary. He is just saying there is a difference between readily achievable and undue burden. And he is just saying look to, Apple, as the gentleman from Massachusetts pointed out, as in their iPad, it is all allowing people who are blind to have accessibility on the iPad, there are also people who have impaired hearing that have accessibility to the iPad.

If it is done in industry on a voluntary basis for the iPad, why can't it be done across industry? I think Mr. Shapiro is saying write the bill with the goals so that it can be done so that what was done with iPad could be done with all the phones so that the Sergeant Major hero here does not have a 4-year-old phone, but he pulls out a phone like an iPhone which is also like an iPad. I think what we are trying to do in this hearing is not create an emotional frenzy here; we are trying to understand how to do it. You offered this bill, Mr. Markey, 2 years ago, perhaps more. And Mr. McCormick and others have come forward to try to say this is how it should be improved, and lo and behold, that improvement was incorporated.

So I think, Mr. Shapiro and Mr. Franklin, when I hear from his discussion, he is asking look it, there are things we should be doing. We should be very careful not to move on an emotional basis on this because this has a huge impact. I think it is a noble goal what we are doing here, and I think everybody in this room wants to make sure that we have products that provide accessibility for the disabled, the blind and the hard of hearing.

In fact, I have a bill with Eddie Towns that does this for the Blind Association that cars that you can't hear—we suggest that the automobile manufacturers ought to make some kind of sound so people who step off the curb—if all the cars in America are electric cars, you can't hear them, they won't be able to hear them either. I am just like everybody else. I want to solve this problem. But I think creating an emotional setup between a CEO and a war hero is not the way to do it. Mr. Shapiro, maybe you should be allowed to talk in a logical manner about what your concern is with the undue burden, and perhaps most of what you think can be readily achievable can be done.

Mr. SHAPIRO. Thank you so much, Mr. Stearns. We have 2,500 companies that exhibit each year at the International CES in Las Vegas. Most of those are small startup companies. They are betting their life savings on——

Mr. STEARNS. They are not Hewlett-Packards

Mr. SHAPIRO. We have those as well. And frankly, I am concerned less about them because they have the staff and the ability to respond to the things. They would have to disclose all their business plans under this proposal. But take a company like Chumby. Chumby is a San Diego company that came up with an idea that you could attach a product to the Internet basically and download some features and it could serve as an alarm clock. Under this legislation, in the course of designing that product, they would have to keep careful records, they would have to talk to all sorts of dis-

ability groups, they would have to prove—they have the burden of proof, Congressman Markey.

There is no undue burden. They would have to file all these documents. They would never be funded. And they would also have to prove that they are accessible to every type of disability. This isn't only about vision and hearing. The law as you have written it says every type of disability, physical, mental, everything. It is impossible to know what that is. I think the role of Congress is to say here is what we are asking you to do, Here are the goals we are trying to reach and go get it, go work with industry and the disability community and come back with a proposal that will meet these very specific goals.

But to say every product has to have every feature to meet every disability, I don't know where we would be under this legislation with all the couple of hundred thousand applications that Apple has now. I don't know where we would be if the Internet was—all these other technologies. The legislation basically applies to everything connected to the Internet. Services—it appears to be software as well as hardware. This is not only about big companies. This is about entrepreneurs. This is about innovation in this country where we are leading the world and it is going to get us out of this lousy economy. And we can't afford to start saying you have to do everything every little company and every big company for everything. Just be very specific, state the goals, get the facts on the table. We have been proposing suggestions for this for a year now and we still have the same legislation with this very, very broad definition that includes everything and every—I mean, the requirements for a company here—startups would go away. I don't know how a company could be funded with this type of requirement.

Mr. STEARNS. I just conclude, Mr. Chairman, what he is trying to say is jobs in America are created by small businesses. And if we put the burden on these small businesses, we will not create jobs. In this economy, we do not need to have mandates that are overly burdensome to the small businesses. And I think Mr. Shapiro's point is basically let us see if we can work it out for this noble goal, and ultimately, I hope we can.

Mr. BOUCHER. Thank you very much, Mr. Stearns. Notwithstanding the intensity of the dialogue, I would underscore once again that we are involved in a collaborative process and we are working our way toward consensus and we are actually making a great deal of progress. And in order to move us even further along that path, I have several questions, the answers to which I hope will be instructive. Can we get agreement that in terms of assuring accessibility, it is not necessary that the device itself have the accessibility feature built in if there are reasonably priced third party applications that achieve that functionality? Mr. Franklin.

Mr. FRANKLIN. Mr. Chairman, I think you are highlighting a very important point about the evolution in the wireless industry and what is happening each and every day. There are a number of examples that——

Mr. BOUCHER. Well, without going into all of the examples, I take it your answer would be yes?

Mr. FRANKLIN. Absolutely yes.

Mr. BOUCHER. Mr. Assey.

Mr. ASSEY. Yes.

Mr. BOUCHER. The answer from the cable industry is yes. Mr. Shapiro?

Mr. SHAPIRO. Yes.

Mr. BOUCHER. Another yes. Mr. McCormick. Let the record show that Mr. McCormick is nodding his head. I think that was a yes. Ms. Hamlin.

Ms. HAMLIN. I am not an engineer and I am not an attorney. But my concern is if you wait for applications—when I have my hearing aid compatible phone, I want to make sure it is there. I am not an engineer. But I would want to be absolutely certain that it would actually work. My consumers, people who talk to me, want to be able to open the box and say yes. I found it difficult to get a cell phone because no one knew you had to turn on the telecoil. So it needs——

Mr. BOUCHER. So maybe I could modify the question slightly and add an assumption or two. Let us assume that the third-party application is functional, that it is readily available and that it is reasonably priced. And if all of those conditions are met, would you agree that the third party application should be acceptable to achieve accessibility?

Ms. HAMLIN. Again, I am not the engineer. I just hope——

Mr. BOUCHER. Just assuming all of that is accurate.

Ms. HAMLIN. I am not sure.

Mr. BOUCHER. We have a not sure. Sergeant Major Acosta, would you care to comment?

Sergeant Major ACOSTA. Yes, sir. My answer is no. The reason suitcase the cost. Here we go again with the cost. And when we talk about the cost——

Mr. BOUCHER. Sergeant Major, my time is a little bit limited. Let me just ask the question in this way. If you require that every device have the functionality embedded, that is going to raise the price of every device that everybody has to pay. Let us assume that the application is reasonably priced. The device itself would therefore be somewhat cheaper. Would that not be a satisfactory outcome?

Sergeant Major ACOSTA. Well, sir, can I give you an example?

Mr. BOUCHER. Sure.

Sergeant Major ACOSTA. I am going to go buy me an iPhone and I am going to pay one price. I am going to go buy me an iMac or the Mac Pro, I am going to pay one price and everything is going to be in there. Those items are going to be a lot less expensive than if I was to go buy a Microsoft or an IBM compatible laptop or PC. And adding the software to it—I will give you one prime example—JAWS $1,400. Oops I just went over the price of an Apple.

Mr. BOUCHER. That would not be reasonably priced software. But assuming a reasonable price and one can perhaps differ as to what that is. Assuming that you have an affordable price for individuals, would you not agree that a third-party application would be satisfactory?

Sergeant Major ACOSTA. I am sorry. What would be reasonable?

Mr. BOUCHER. A lot of the applications that are purchasable today are a dollar or 2. That is fairly common in the app store.

Sergeant Major ACOSTA. Well, sir, what would be reasonable to us compared to the industry that is putting out the market?

Mr. BOUCHER. If you require that the device, every device that is marketed be embedded with the functionality, that raises the price of all of the devices. And so it is a question of whether everyone pays this cost or whether the additional marginal cost, which again, would not be that great, would be borne by those that are desiring that accessibility.

Sergeant Major ACOSTA. Well, sir, again, when we went from analog to digital, the government handed out coupons to be able to afford these items. Aren't they going to do the same thing?

Mr. BOUCHER. Thank you, Major Acosta. I think we understand that you don't welcome that concept. Let me ask this question: The FCC has hearing aid compatibility standards for cell phones. Those apply not to every cell phone, but to a percentage of the cell phones. And these functionality requirements address things like—or assure things like a variety of devices instead of one standard device. A variety of functionalities, instead of one standard functionality and also a variety of prices based upon the various devices that are available and their functionality.

So my question to you is would a similar kind of approach work with regard to accessibility for the hearing impaired on other kinds of devices or for Internet accessibility with regard to cell phones themselves? The legislation before us, basically, requires the functionality for all devices unless it is established that to embed that function would constitute an undue burden. So would it be—would it be better to adopt the FCC's approach with regard to cell phones that exist today so that it is only a percentage of devices for which this accessibility functionality is required? Who would like to answer? Ms. Hamlin?

Ms. HAMLIN. Again, part of the problem is—we went through a long, hard negotiations to get to that point. And we wanted to work with industry and we were happy that we came to that. But the problem is—there are two problems, first of all, that the companies must then meet the requirements and then the consumers have to know. People like myself who came into hearing loss suddenly and people who age into it may not even know. So it has to be incumbent upon people to also let people know.

So I go to my Web site now to find out which cell phones are compatible and then I go to my store and I find out, well, oK, there is a list of compatible phones, but they are not available anymore. So it would have to not just be a matter of coming up with a way to say, oK, we have a percentage. But they would have to really meet them, they would have to really meet the percentages and we would have to also make sure that people actually understood what cell phones——

Mr. BOUCHER. What it is they are buying?

Ms. HAMLIN. What it is they are buying, how are they going to get a hold of it.

Mr. BOUCHER. If the percentages are actually hard requirements and if there is clear marketing information available, potentially that approach could work.

Ms. HAMLIN. It might be able to work.

Mr. BOUCHER. OK. Thank you, Ms. Hamlin. My time has expired. The gentleman from Alabama, Mr. Griffith, is recognized for 5 minutes.

Mr. GRIFFITH. Thank you. And we appreciate this testimony and the back and forth is invaluable to us. I would say this, that this is a very innovative and creative area of our economy and the ingenuity that has been displayed over the years has just been remarkable. We have gotten as far as hearing is concerned. I think the quote from Helen Keller was my loss of sight separates me from objects, my loss of hearing separates me from people. We are all sensitive to that.

I will give you an example. If we required every biotech company to develop a drug that treated every cancer, there would be no innovation. We would not be here where we are today with the breakthroughs in melanoma, et cetera. We are going to see the same breakthroughs. We are going to see the same breakthroughs for our hearing impaired, our sight impaired and we are making great progress. I hope that this bill will be worked out to the satisfaction of all. We have got to move it and realize that these little small, small companies with 1 or 2 people that come up with this idea in their garage and they work at it after work is over and come up with the things that have really made a difference in our lives in America. It is the unique culture of America that allows that.

I don't really have any questions for you because I think every one of your hearts are in the right place and I hope that we will reach the right conclusion. Thank you, Mr. Chairman.

Mr. BOUCHER. Thank you very much, Mr. Griffith. The gentleman from Washington State, Mr. Inslee, is recognized for 5 minutes.

Mr. INSLEE. Thank you. I want to ask the question about how we design the bill to make sure that we capture new innovations, that we don't freeze in time existing standards and don't take advantage of innovations. Let me give you an example. One of the things the bill right now requires a button on a remote control, designated for activating the closed caption function.

As new innovations move forward, perhaps we will have voice activated or have other systems other than a button. I guess the question I would like to ask the panel, how do we design a system to capture new generations of innovation? Let me give you an example. Would it be better to define the user experience that we expect? For instance, we expect something that will activate a particular activity that will only require two actions by the user and then let the technology develop as to what those two actions are? In other words, we define it based on the user interface rather than the particular technology. I just would ask the panelists, is there a way to do that and a way to make sure that we capture new generations of technology. Would anyone like to offer a thought in that regard?

Mr. ASSEY. I will try, Congressman. I think what you point out is something that I mentioned that is critically important that when we address some of these issues, that we address them from the standpoint of achieving a functional objective, a button on a remote may work in some cases, it may work and not. In other cases,

it may not. But what is important is that we have a clear idea of the problem that we are trying to solve and then we turn over to the engineers the best way to try and achieve that problem. And that hopefully will allow for new innovative solutions that may ultimately reach the same functional goal.

Mr. INSLEE. So I would like to work with any of you that have suggestions about how to refine the bill in that direction. I think it makes sense to think about this from the user perspective rather than the particularly defined technology. The second question I want to ask the panelists is about the undue burden in the bill right now and I think there is something we ought to at least think about what that means. Right now I would understand this if a company—let us just take a large manufacturer that is going to come out with a relatively niche product—and the bill as written would require access—unless it is an undue burden for the entire manufacturing company, for the revenue stream the way I would look at this, for the whole revenue—compared to the whole revenue stream of the whole company.

So let us assume you have got a $2 billion-a-year company and you have got a product that may only generate a million dollars revenue. Right now, as I understand the undue burden requirement, you would compare the cost of doing the access for the new product against the revenue stream of the entire company, which may, I suppose, could exceed the entire proposed revenue of that particular niche product.

I guess a question I have is, would it make any sense for us to define the undue burden as comparing it as the undue burden compared to the revenue stream of the product that we are talking about? Would that be a more rational way to define undue burden? I guess the reason I suggest this is that if you compare the cost of the entire cost of the entire corporation, you may just decide not to produce the product at all. And we want to make sure we get these products out there. So I guess I would ask for the panelists' comments about that idea.

Mr. SHAPIRO. Congressman, I think you raise an excellent point and that is why we think the undue burden standard is inappropriate and we use a reasonably achievable standard. And if you think about it—readily achievable. If you think about it, the example you just gave, that company would not produce that product because if it is going to cost them—it is not only the revenue stream, if it costs more than the profit, they just don't produce it.

Mr. INSLEE. To short circuit your answer a minute. I consider undue burden a little higher obligation on the manufacturer than readily achievable. What I am suggesting is that you maintain the undue burden language but you apply it to the revenue stream of the product involved. Do you see what I am suggesting?

Mr. SHAPIRO. I understand what you are suggesting, but still what you are saying is unless as a manufacturer, making that decision to invest in the research and development, the design, all the things required, talking with different portions of the disabled community, figuring out—and even then you don't know if you have an undue burden unless you get a special exemption from the government saying you have an undue burden. That is why we are so concerned about innovation. Undue burden is the wrong standard here

in our view. We believe readily achievable has worked very well. Undue burden is for the construction industry for something that will last 30 or 40 years. These technologies have a shelf life of 2 or 3 years at the max and you have to respond quickly. This would be a choke collar around innovation.

Mr. INSLEE. Ms. Hamlin, did you want to add something?

Ms. HAMLIN. I have to admit and I am very concerned about it, we look at innovation and we want innovation. But here is what I see this bill does that sort of answers that is that we are not just looking at one company. You are not saying only one company has this extra added issue that they have to deal with. It is all of them across the board. So now the playing field is level. Now you have everybody at the same standard.

So that—oK, everybody now has to look at the same issue and design in the same way so the cut throat industry that is so eager to get everything out so quickly, if everybody is on the same page, I think, it is my feeling, that that will answer that question and help us get the products we need and the companies not have to feel like they have to kill each other to get to that point.

Mr. INSLEE. Thank you.

Mr. BOUCHER. Thank you very much, Mr. Inslee. The gentleman from Nebraska, Mr. Terry, is recognized for 5 minutes.

Mr. TERRY. Thank you, Mr. Chairman. And let me first compliment you and Mr. Inslee on what I thought were appropriate, probing questions which are a part of the process at a hearing like this where we really want to figure out how to make this the best bill that is possible and achieve the goals of the bill. In that regard, let me then take a personal point of privilege here to say that I just feel slimed right now, politically slimed by the setup by—question by Mr. Markey, and I apologize to everyone of you up there that had to be a part of that or were put into that position. That just seems to be the tone right now with the leadership that is in charge of this place. It is intimidation and how dare anyone have an opinion different.

And if you dare to express it openly, we will come after you. And, Mr. Shapiro, you just saw what the new tone in Washington is. We have seen it from Mr. Markey before, with cap and trade. We had a gentleman that testified from a major electrical generation company and dared to testify in opposition and within hours had a filing to investigate him at the request of Mr. Markey. That is the level of intimidation that is occurring here right now. And I——

Mr. BOUCHER. Mr. Terry, let me——

Mr. TERRY. You don't need to suggest that we—I think your point has been made. Let us direct questions towards the issue that we have before us. Terror, in all due respect, Mr. Chairman, you did not ask Mr. Markey to do the same thing.

Mr. BOUCHER. Well, Mr. Markey was addressing the subject matter, Mr. Terry.

Mr. TERRY. No. Mr. Chairman, in all due respect—reclaiming my time. In all due respect, Mr. Markey was pitting 2 witnesses against each other to create a fight between them and that was demeaning to this subcommittee. Mr. Chairman, your questions were completely appropriate. And that is the questions I thought we were going to ask here today. So let me help clarify.

Ms. Hamlin, you seem to have a pretty good grasp and feel, but I need to kind of work through this a little bit with—I am confused. If there is a Mac that doesn't provide—I am sorry—a Mac Pro that provides applications that you feel are necessary for you with your hearing loss but a Microsoft product doesn't, is this bill supposed to make the Microsoft one have exactly the same applications as the Mac Pro? Is that the goal?

Ms. HAMLIN. People with hearing loss—and I believe it is true with people with vision loss as well—have a wide range of needs. My needs—I have a hearing aid. I have a cochlear implant. My needs may be different when I pick up a cell phone than someone else. If you design it so that I can use it, somebody with a mild hearing loss, somebody who aged into hearing loss or so that grandma can use it, as well as somebody who has a significant loss can pick it up and read the text and be able to have that as well, then you have created a universal design so that the Sergeant Major can also use it. So I don't have to worry about, oK, I go to the phone—everybody said how wonderful Apple is. I cannot use an Apple phone because it isn't compatible with my hearing aid. If you created an Apple now, I get all the wonderful features that Apple has that I cannot get here. But that——

Mr. TERRY. That is an interesting point.

Ms. HAMLIN. What I want is to have everyone have that access. And people who age into their hearing loss simply do not know, just as the Sergeant Major didn't know before he learned about vision loss—I didn't know before I woke up one morning about hearing loss. People don't know what is available. If it is out there, you don't have to fiddle around and wonder what do I do now.

Mr. TERRY. I am trying to work my way through this. In regard to Mr. Boucher's questions about some cell phones are capable with hearing aids, some are not. So the position would be that all should be?

Ms. HAMLIN. My position would be, yes, I would love to see every single cell phone compatible with anyone who wants to—because I am not worried about me so much. I am worried about my son and my daughter. They need access to the Internet. They can't work. I want them to pay taxes and work.

Mr. TERRY. That is the question. If there are items out there that accomplish that task, is it an undue burden in essence and I think we need to discuss what undue burden really means, but my time is up. But the question is then if there is products out there that are reasonable and accessible, does that mean that every one has to adopt it? I yield back.

Mr. BOUCHER. Thank you very much, Mr. Terry. And we want to thank you each of our witnesses for attending here today, sharing your views on this matter with us. Your testimony has informed us. I will, again, thank you all of you for the collaborative process we have underway to try to reach census and agreement on this measure and we are making great flog that exercise.

I would encourage you to redouble your efforts in that respect and attend all of the meetings and share your good thoughts on how we can reach consensus because it is our intent to bring this legislation to markup in the not too distant future. We haven't picked a date yet. But it is around the corner and so we need your

help to move as rapidly as we possibly can. With the committee's thanks to each of you, to all of our witnesses for your comments today, this hearing stands adjourned.

[Whereupon, at 11:43 a.m., the subcommittee was adjourned.]

[Material submitted for inclusion in the record follows:]

Statement of
Representative John D. Dingell
Committee on Energy and Commerce
Subcommittee on Communications, Technology, and the Internet
Hearing on "H.R. 3101, the Twenty-First Century Communications and Video Accessibility Act of 2009"

June 10, 2010

Thank you, Mr. Chairman, for convening today's hearing on H.R. 3101, the Twenty-First Century Communications and Video Accessibility Act of 2009. Let me welcome all of our witnesses and thank them in advance for their testimony and the useful comments I hope they will provide in the course of this hearing.

I share Congressman Markey's goal in making new communications technologies accessible to Americans with disabilities. Simply by virtue of being disabled, a person should not be *de facto* denied access to the communications technologies the vast majority of Americans take for granted. The Congress has done much to advance the causes of the disabled, most notably in the Americans with Disabilities Act, but more remains to be done.

This in mind, I commend Congressman Markey for his work, embodied in H.R. 3101, to ensure disabled Americans have access to and can use the communications technologies of the 21st century. As my colleagues are aware, I have long insisted on appropriate, reasonable, and practicable statute and regulation. As such, I have questions about certain of H.R. 3101's provisions, which I hope our witnesses will answer with great candor. In particular, I seek clarification on the following two points:

- Section 203 of H.R. 3101 reinstates the Federal Communications Commission's video description regulations that were struck down in 2000 and further mandates the Commission complete a rulemaking to improve such regulations within one year's time. Do our witnesses believe such expansion is necessary and could be feasibly complied with? Further, why should such rulemaking not be preceded by a study to address the issues I have just mentioned?

- I understand that closed-captioning for television is different from closed-captioning for online video. What progress is being made to streamline the closed-captioning process for both media, and do our witnesses believe H.R. 3101 adequately takes into account such developments?

I thank you, Mr. Chairman, for your indulgence and look forward to a productive discussion today. Again, I re-iterate my support for the end toward which Congressman Markey strives and hope we continue to pursue a collaborative means by which to achieve it. With that, I yield back the balance of my time.

Statement of Rep. Anna G. Eshoo
The *21st Century Communications and Video Accessibility Act of 2009*
H.R 3101
Subcommittee on Communications, Technology, and the Internet
2123 Rayburn House Office Building
June 10, 2010

Thank you, Mr. Chairman for holding this hearing on legislation aimed at ensuring accessibility to all technology and telecommunications devices and services to everyone. I commend Representative Ed Markey for his continued leadership and his tireless advocacy on behalf of individuals with vision, hearing, and other disabilities.

The technology and telecommunications industries have delivered innovations at a blistering pace over the last decade and a half. Cell phones are now smart phones that can fit in the palm of your hand. Homes all across America are now not only wired, some are totally wireless. Televisions have and continue to evolve into devices that bring increased access to technology directly into to our living rooms via cable, satellite, and fiber optics.

This innovation has benefitted our economy, our workforce, and our global leadership. As Members of Congress, we must ensure that all U.S. citizens reap the rewards.

The *21st Century Communications and Video Accessibility Act of 2009* works to address the needs of individuals with vision, hearing, and other disabilities by updating communications laws that were last revised in 1996.

I'm pleased the Subcommittee is addressing these issues and that we have full industry participation and their commitment to deliver access to all. For any update of communications law, it's critical for industry to work with representatives of the disabilities communities to ensure innovations continue to be delivered, and no one is left behind.

Telecom Subcommittee Markup of H.R. 3101, the Twenty-first Century Communications and Video Accessibility Act
June 30, 2010
Congressman Zack Space, Opening Statement

Thank you, Chairman Boucher.

I applaud your efforts and the efforts of Ranking Member Stearns – as well as the efforts of this bill's sponsor, Congressman Markey – in working so diligently to hammer out a bill that supports the pressing needs of the disability community while simultaneously addressing the concerns of industry stakeholders.

One area of the bill that I'd like to continue talking more about is Section 203, which addresses video description and closed captioning. The amendment in the nature of a substitute that we'll consider today requires the big four broadcasting networks to provide 50 hours of video description a quarter…but only in the top 25 Designated Market Areas. What this means is that my constituents in Holmes County, for example, who are within the Cleveland-Akron DMA, will have access to more video description services than my constituents in Muskingum County who are part of 203rd most populous DMA.

I am not entirely sure how I will explain this disparity to members of the disability community who have the misfortune of living in a county outside of the top 25 DMAs. I fear that while trying to improve video description services, we are perhaps unintentionally creating a divide between rural and urban areas.

Mr. Chairman, I hope that we can continue discussing this issue as the bill before us today moves forward.

Thank you, and I yield back.

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